FOUNDED IN 1856

RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

DECEMBER 9, 1950

DEC 11 1950

76,767*

UNIT TRUCK

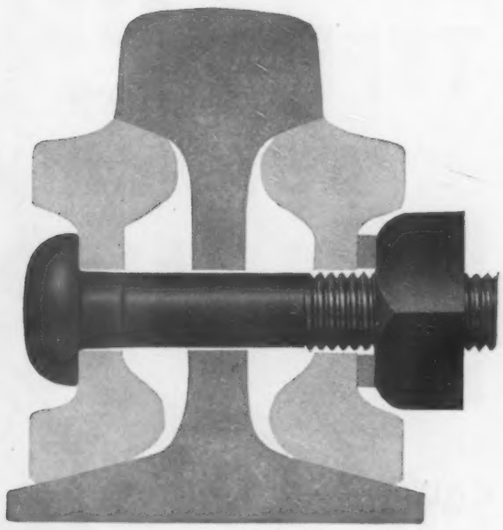
CARSETS

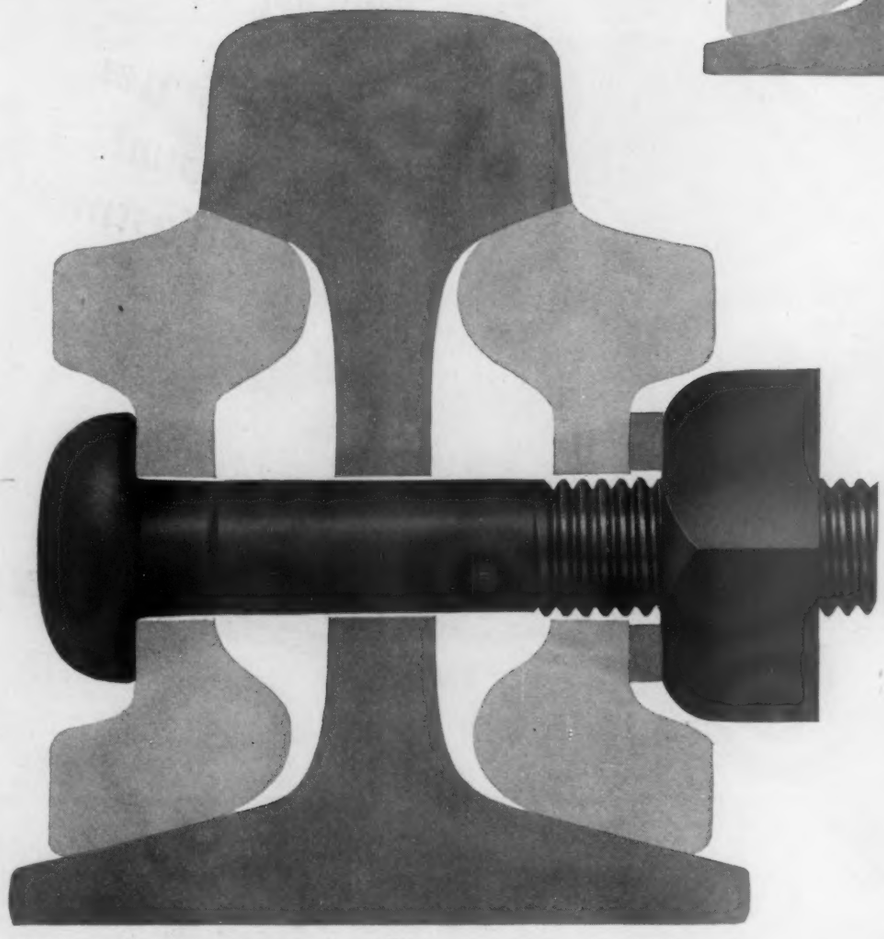
WERE BOUGHT IN

1950

* AS OF NOVEMBER 30th, 1950

Track Bolts





FOR EVERY WEIGHT OF RAIL

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation

Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL

Bethlehem supplies every type of Railroad Fastener

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year, U. S. and Canada. Single copies, 50 cents each. Vol. 139, No. 24.

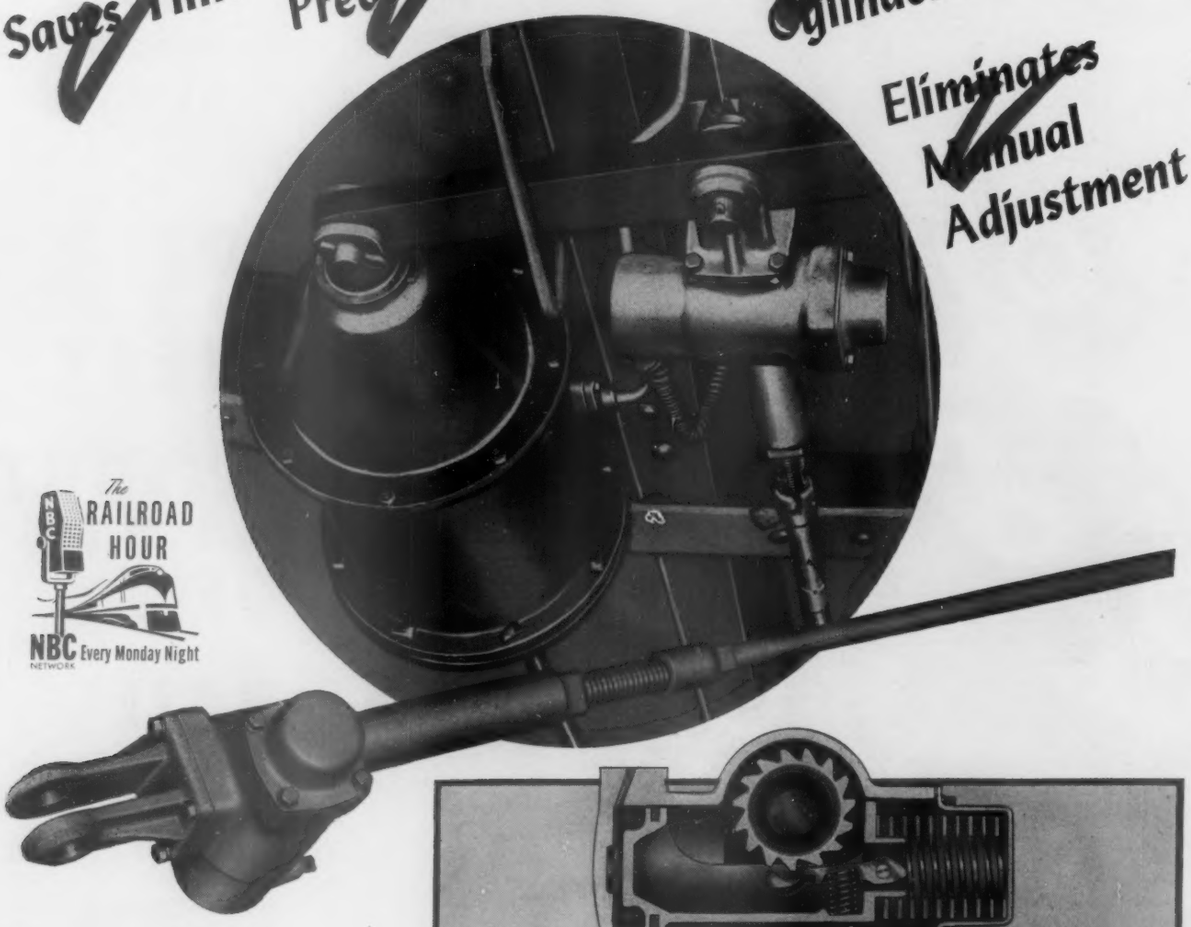
TYPE D PNEUMATIC
AUTOMATIC SLACK ADJUSTER
FOR FREIGHT CARS

Saves Time

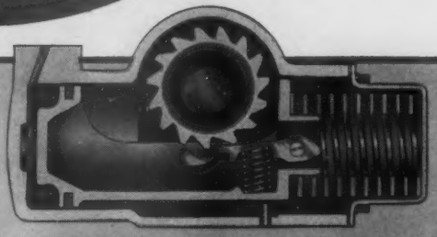
Prevents False "Take-Up"

Conserves Cylinder Force

Eliminates Manual Adjustment



The RAILROAD HOUR
NBC Every Monday Night



If predetermined travel of brake cylinder piston is exceeded, air is admitted to slack adjuster, compressing piston against spring. Upon brake release, spring returns piston, and pawl engages and turns ratchet nut, shortening tie-rod connection.

Proven in years of Passenger Service. Ask for Descriptive Leaflet 2468.

Westinghouse Air Brake Co.

WILMERDING, PA.

Vol. 129, No. 24 December 9, 1950

RAILWAY AGE

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Published by
SIMMONS-BOARDMAN
PUBLISHING CORPORATION
The House of Transportation
and Building
Publisher of
Railway Age
Railway Engineering & Maintenance
Railway Mechanical & Electrical Engineer
Railway Signaling & Communications
Car Builders' Cyclopedia
Locomotive Cyclopedia
Railway Engineering & Maintenance Cyclopedia
American Builder
Marine Engineering & Shipping Review
Marine Catalog & Buyer's Directory
Books covering transportation and building

Office of Publication, Orange, Conn. Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Seattle 1: 1914 Minor Avenue—Portland 5, Ore.: Terminal Sales Building—Los Angeles 17: 816 West Fifth Street—Dallas 4: 2909 Maple Avenue.

James G. Lyne, President. Samuel O. Dunn, Chairman Emeritus. J. S. Crane, Vice-President and Secretary. C. Miles Burpee, Harry H. Melville, C. W. Merriken, John R. Thompson, R. E. Thayer, H. E. McCandless, Vice-Presidents. Robert G. Lewis, Assistant to President. Arthur J. McGinnis, Treasurer. Ralph E. Westerman, Assistant Treasurer.

Subscriptions: including 52 regular weekly issues, and special daily editions published from time to time in New York or in places other than New York, payable in advance and postage free — United States, U. S. possessions and Canada: 1 year, $6.00; other countries not including daily editions in Western Hemisphere: 1 year, $10.00; 2 years, $16.00; other countries: 1 year, $15.00; 2 years, $25.00. Single copies, 50 cents each, except special issues.

H. E. McCandless, Circulation Manager, 30 Church Street, New York 7.

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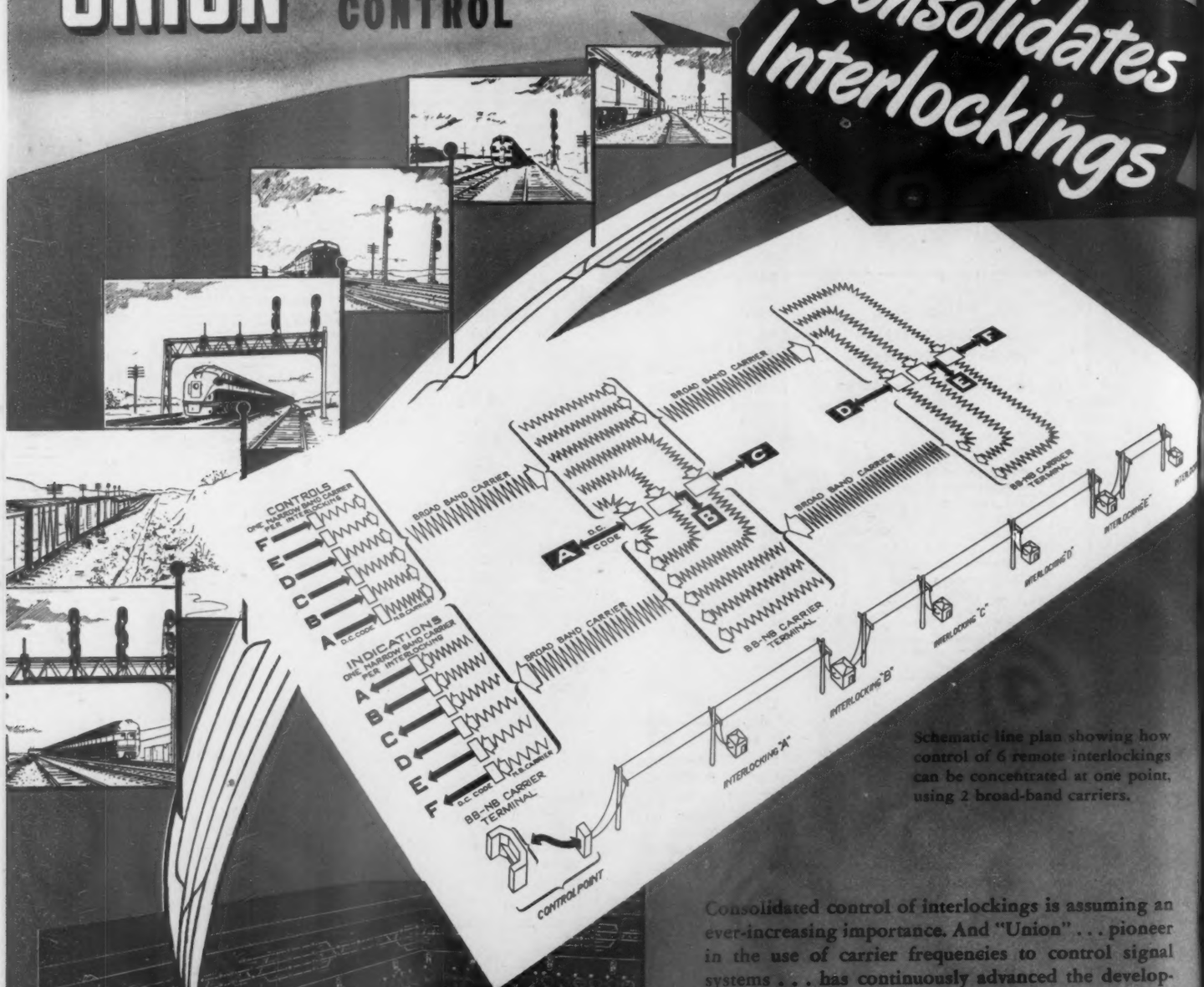
Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn. Printed in U. S. A.

"UNION" BROAD-BAND, NARROW-BAND CODED CARRIER CONTROL

Consolidates Interlockings



Schematic line plan showing how control of 6 remote interlockings can be concentrated at one point, using 2 broad-band carriers.

Consolidated control of interlockings is assuming an ever-increasing importance. And "Union" . . . pioneer in the use of carrier frequencies to control signal systems . . . has continuously advanced the development of Coded Carrier Control to meet new and diversified demands.

"Union" Broad-Band, Narrow-Band Coded Carrier Control, for example, is especially designed to concentrate the control of an extensive series of remote interlockings at one point, such as division headquarters. It utilizes narrow-band frequencies—modulating broad-band carriers—in such a manner that the controls and indications can be confined to a relatively narrow range of frequencies handled by a few broad-band carriers.

So when you plan your interlocking consolidations, call in our engineers . . . let them show you how you can obtain greater efficiency and save money . . . with "Union" B-B—N-B Coded Carrier Control.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

NEWS HIGHLIGHTS: Southern orders 101 diesels; Central of New Jersey issues inquiry for 31.—Department of Defense announces traffic policies.—Rock Island buys 3,000 box cars; G.M.&O. orders 700 box cars and 300 gondolas.—Baldwin, Lima-Hamilton consummate consolidation agreement.—Grand Trunk Western plans heavy 1951 program of maintenance and equipment purchases, possibly including 62 diesels, 1,400 freight cars and some passenger equipment.—C.N.J. inquires for 500 box cars.—N.Y.C. opens new freight facilities in Rochester, N.Y., area.—Congress gets bill to remove Long Island from I.C.C. control; new trustee nominated.—Six industry leaders pledge "fullest national service" at annual dinner of New York Railroad Club.—Railroads announce special low holiday fares for armed forces personnel.—Eastern roads file petition for 4 per cent rate increase; twelve of them raise "red cap" fee to 25 cents.—C. N. President Donald Gordon says higher wages and 40-hr. week will mean higher freight rates in Canada, as government studies "equalized" rates and denies appeal by seven provinces for revision of 1949-1950 rate rises.

FOR "OPTIMUM INVESTMENT IN TRANSPORTATION": "Investment plays a key role in determining the level of economic activity. . . . [It is] a matter of real significance to have the optimum investment in transportation facilities. . . . Equality of treatment of all media of transportation is the best method of stimulating the optimum investment and employment in this and related industries." Those are some of the principal conclusions of a paper, abstracted on pages 32-34, which was presented to the recent Mexico City meeting of the Pan American Railway Congress by Professor Julian S. Duncan of the University of New Mexico. In it, Prof. Duncan makes some specific suggestions for both government and railroad action to stimulate this "optimum investment."

FACE LIFTING: That's what New Orleans' Huey Long bridge is getting, with the new fire and corrosion resisting aluminum decking now being applied. How the work is being done—and why—are both told in the illustrated article which begins on page 36.

ICING RECORD: A simplified and more accurate car icing record developed by the G.M.&O. is the subject of a short feature article on page 35.

MULTIPLY BY EIGHT: Railroad purchases of cars and locomotives in the first nine months of 1950 aggregated nearly $915 million—almost certainly the largest dollar total ever reported in any similar period, and *more than eight times* the less than $109 million committed for new equipment in the corresponding part of last year. Because of this tremendous upsurge of equipment orders, total railroad purchases between January 1 and September 30 were well over the $2-billion mark, and almost 50 per cent ahead of 1949's nine-month total. Detailed figures for September and nine months, and comparisons with similar periods in other years, are given on pages 41 and 42.

TRACKMOBILE: The Whiting Corporation's versatile new Trackmobile—a one-man, 6,000-lb. road-rail machine capable of moving loaded freight cars in yard and intra-plant switching work—is described and illustrated on page 40.

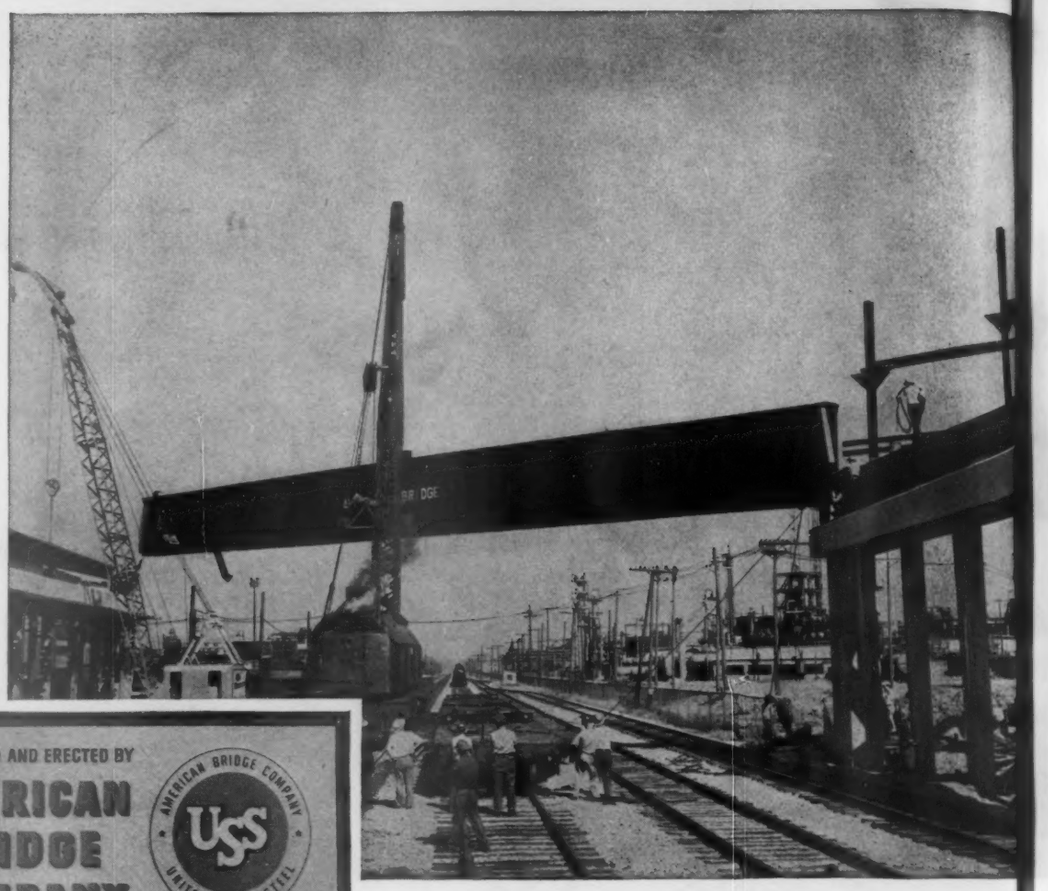
LOOKING BETTER: In the first 10 months of 1950 Class I railroads had an estimated net income, after charges, of $575 million, or just a little less than double the 1949 10-month net of $302 million. Net railway operating income was $814.6 million against $542.8 million. For October alone, net of $108 million was just about five times the October, 1949, net of $22 million, when coal and steel strikes were cutting railway traffic. Detailed figures appear in the News section.

HONESTY IS THE BEST POLICY: As noted in the News pages, the Bureau of Internal Revenue has once more arrayed itself among the staunch supporters of that old proverb, by rescinding its 1942 ruling which permitted truck operators to claim as income tax deductions the fines they paid for violating state laws regulating weight and size of trucks.

HALF THE SIDINGS: The benefits of centralized traffic control are too well known by now to need much elaboration, but new installations usually have some interesting points. Witness, for example, the M.P.'s 82-mi. Middlebrook-Poplar Bluff operation, which increased track capacity and improved train performance with only nine of the 19 former sidings. (Page 28.)

RAY OF SUNSHINE: As the normal seasonal decline in car loadings sets in, the serious car shortages of recent months are beginning to disappear. They were down, for the week ended December 2, to 10,718 cars of all types—a drop of some 6,000 cars, or roughly 37.5 per cent, from the preceding week. Some surpluses are beginning to show up as well, in all types of cars; they totaled 6,815 cars last week.

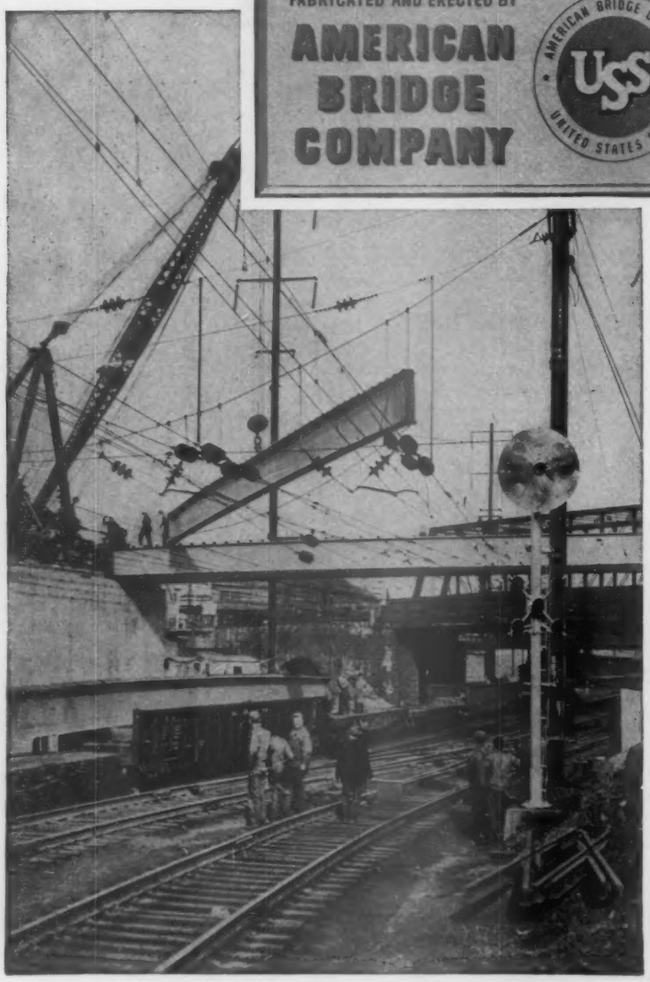
FOR POLITICAL ACTIVITY: Further exposition of the thesis that rail problems, being fundamentally political in origin, can be solved only by what is generally referred to as "political" action is the theme of this issue's leading editorial.



American Bridge erects an 88-ton, 140′ long plate girder span over the Chesapeake and Ohio Railway tracks in the yards of The Dow Chemical Company, Midland, Michigan. This structure was erected without hindering rail traffic. Darin & Armstrong, Inc., General Contractors; L. W. Millard, Consulting Engineer.

Erecting highway overpass above the Pennsylvania Railroad tracks, New York Division, Mercer County, Trenton, New Jersey. Despite the maze of electric transmission lines surrounding the work, and the rail traffic below, American Bridge completed the job successfully, without interruption to traffic. Kaufman Construction Company, Contractors; Designed by New Jersey State Highway Department.

FABRICATED AND ERECTED BY
AMERICAN BRIDGE COMPANY



When erection will be under difficulties —*it's a job for* American Bridge

● We offer the erection of the plate girder span over the Chesapeake and Ohio Railway tracks at Midland, Michigan—and the erection of the highway overpass above the Pennsylvania Railroad tracks at Trenton, New Jersey, as substantial proof of this fact:

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General Offices: Frick Building, Pittsburgh, Pa.
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LYNCH CARRIER TELEGRAPH AND TELEPHONE EQUIPMENT

The Lynch B-49 is a complete carrier telegraph terminal: Transmitter, Receiver, Power Supply, and telegraph loop facilities, including 3 polar relays. Yet it requires only 5¼" of vertical mounting space!

Maximum accessibility is assured by the hinged front cover with lockable latch. A removable cover protects the rear terminals from accidental contact or damage.

B-49 Carrier Telegraph Terminal offers carrier-shift operation in a compact, accessible design

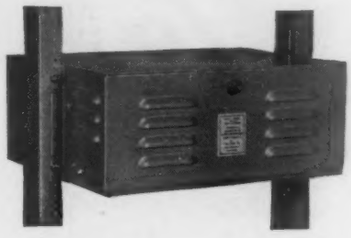
The Graybar Electric Company, Inc., nation-wide distributor of electrical equipment for railroads, is pleased to announce its appointment as national distributor of carrier telegraph and telephone equipment manufactured by the F. W. Lynch Company, of San Francisco.

Like all the electrical items Graybar provides for the nation's railroads, Lynch equipment is intelligently engineered, well built, and thoroughly proved in satisfactory performance.

Illustrated on this page is the Lynch B-49 Carrier Telegraph Terminal—a complete terminal, offering outstanding performance because it utilizes the carrier-shift principle of operation . . . because its new circuitry makes full use of frequency modulation's advantages . . . and because it combines these improved performance characteristics in a mechanical design of unusual compactness and accessibility.

Lynch Telephone Terminal Assures Stable Operation

Graybar also recommends the Lynch B-37 Carrier Telephone Terminal—a completely self-contained terminal, including transmitter, receiver, power supply, and signalling facilities. The signalling system, a Lynch development, operates on the frequency-shift principle and provides positive, exceptionally quiet operation even in the presence of noise and under conditions that produce wide variations in line attenuation.



Descriptive Bulletins Available

A brochure giving complete information, specifications, and frequency assignments of the Lynch B-49 system is yours for the asking. Also available is a similar brochure describing the Lynch B-37 system and showing its circuit diagrammatically. To obtain either or both, please use the coupon below.

OFFICES AND WAREHOUSES IN OVER 100 PRINCIPAL CITIES

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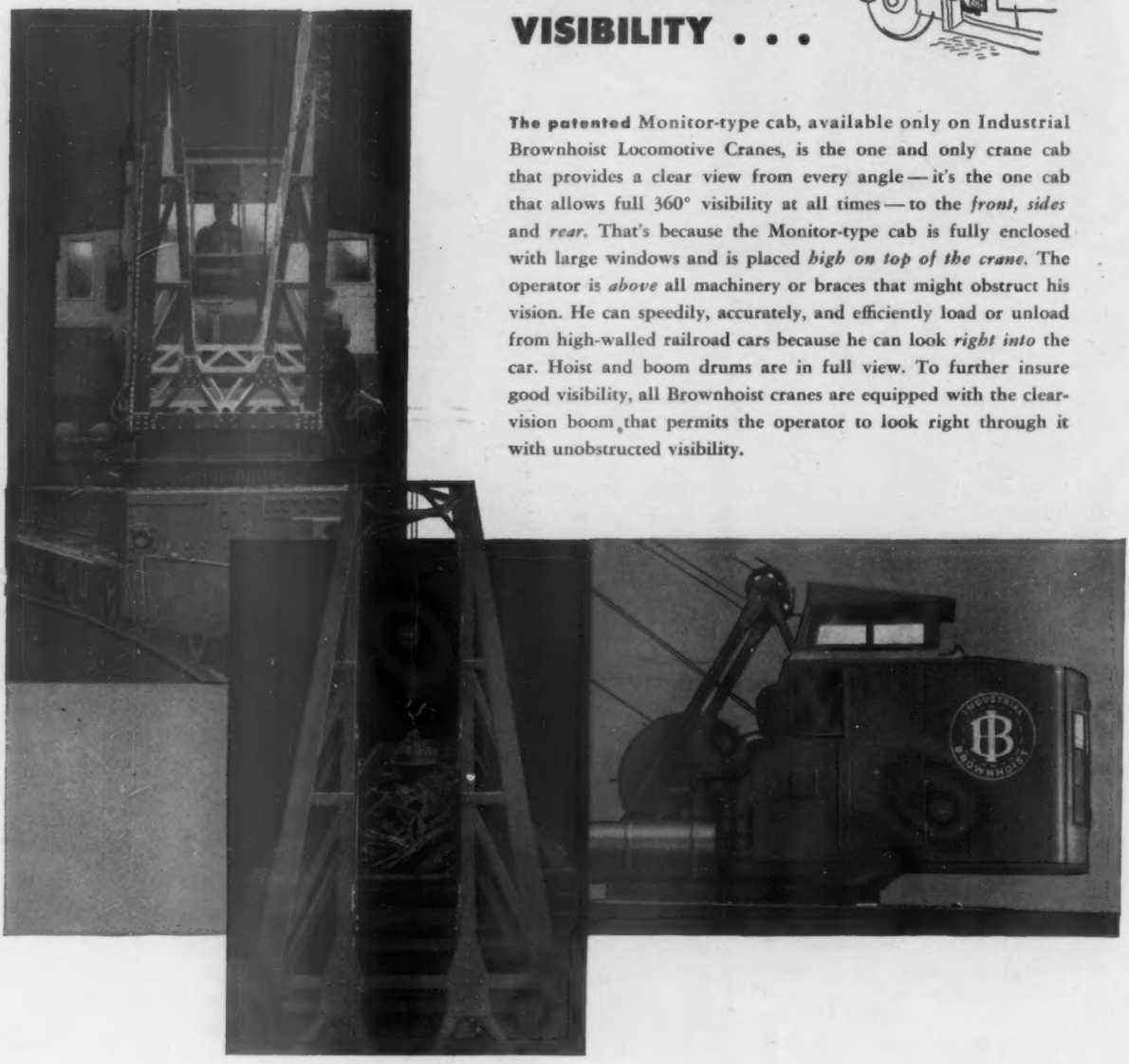
NO BLIND SPOTS IN THIS CAB!

EXCLUSIVE BROWNHOIST "MONITOR-TYPE" CAB GIVES CRANE OPERATORS CLEAR FULL-CIRCLE VISIBILITY . . .



The patented Monitor-type cab, available only on Industrial Brownhoist Locomotive Cranes, is the one and only crane cab that provides a clear view from every angle — it's the one cab that allows full 360° visibility at all times — to the *front, sides* and *rear.* That's because the Monitor-type cab is fully enclosed with large windows and is placed *high on top of the crane.* The operator is *above* all machinery or braces that might obstruct his vision. He can speedily, accurately, and efficiently load or unload from high-walled railroad cars because he can look *right into* the car. Hoist and boom drums are in full view. To further insure good visibility, all Brownhoist cranes are equipped with the clear-vision boom that permits the operator to look right through it with unobstructed visibility.

In addition to full-circle visibility, the Monitor-type cab is designed to afford the utmost in comfort and safety including doors on both sides and 14" safety clearance between car and rotating upperworks. There is a soundproof partition between the operator and machinery — provision for opening all windows and doors for full ventilation — all operating controls are easily reached from a comfortable, well raised seat. Write today for more facts complete with specifications.

140

BROWNHOIST BUILDS BETTER CRANES

INDUSTRIAL BROWNHOIST CORPORATION • BAY CITY, MICHIGAN • DISTRICT OFFICES: New York, Philadelphia, Pittsburgh, Cleveland, Chicago, San Francisco, Canadian Brownhoist Ltd., Montreal, Quebec. AGENCIES: Detroit, Birmingham, Houston, Los Angeles, Portland, Seattle, Spokane.

Passenger Comfort and Electric Power

Modern cars assure comfortable travel as a result of many things, not least of which is the increased use of electric power for improved lighting, better control of temperature and humidity, and the operation of a variety of electrical appliances.

The capacity of the electrical system, including the storage battery, has increased correspondingly; so that the use of EDISON Nickel-Iron-Alkaline Storage Batteries — the original light-weight batteries — saves more weight than ever. Often the saving amounts to as much as a ton per car — sometimes even more.

This saving is made without sacrificing mechanical strength; on the contrary, the steel cell construction of EDISON batteries is the strongest known, and is an important reason for their long life. Their long life in turn means low costs of operation. And today these costs are substantially lower, compared to other operating costs, than they were before the war because selling prices of EDISON batteries have advanced little more than half as much since 1940 as the average prices of materials purchased by American railroads. Get an up-to-date price quotation from our nearest office; see how much you can save in operating costs. Edison Storage Battery Division of Thomas A. Edison, Incorporated, West Orange, New Jersey.

EDISON

Nickel • Iron • Alkaline

STORAGE BATTERIES

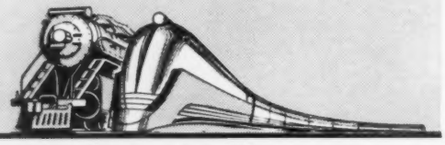
COMMONWEALTH RAILWAYS
Kalgoorlie

RDC GOES ABROAD

The Commonwealth Railroad of Australia has placed an order for three all-stainless steel, Budd-built, RDC rail diesel cars. This railroad operates the great Transcontinental Railway which spans the southern portion of the continent from Port Pirie, on the south coast, to Kalgoorlie, in the west. RDC will have plenty of room to roam . . . and to demonstrate its ability to provide fast, frequent service at the lowest operating cost of any form of railway passenger equipment. The Budd Company, Phila. 32.

Budd

"Shop and Track Talk"



Published by OXWELD RAILROAD SERVICE DIVISION, Union Carbide and Carbon Corporation

Costly Diesel Parts Saved from Scrap Heap

When hard-to-weld diesel parts become badly worn they're usually scrapped. But not in this shop! Most of the worn or damaged parts are quickly returned to service—thanks to HELIARC welding. Aluminum, cast iron, and stainless steel parts are all welded with excellent results.

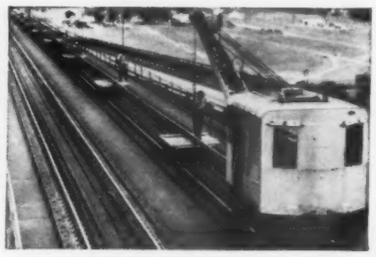
Cast iron cylinder heads are welded in compact, heat-retaining boxes. While the box holds the heat, the operator repairs any cracks and rebuilds worn valve seats. Minimum finishing is required because no flux is needed to produce clean, smooth welds with a HELIARC torch.

Building up a worn valve seat in a cast iron cylinder head.

The shop repairs everything from huge gear-box casings to small castings — even high-alloy valves are reclaimed. Recently, a badly smashed Everdur condenser tank was salvaged. Thirty-three lineal feet of HELIARC welding put the tank back in service.

Same Rail, Same Track, But No Clickety-Clack

Here's a railroad that replaced 9 miles of jointed standard track and only purchased 400 tons of new 110 lb. rail. The new rail was welded and laid in track. The old rail released was sorted and curve-worn rail discarded. The balance was cropped and welded into 1326 ft. lengths, then put right back in the same track. This procedure was continued until the job was completed.



"Ribbonrail" 1326 ft. long being hauled on push cars.

That's how "Ribbonrail" was produced for the Huey Long Bridge across the Mississippi. About seven miles of old rail was re-used. The old rail—in the same track—now provides a smooth-riding surface. Harmful bridge vibrations caused by wheels hitting conventional joints are now eliminated. But more important, joint bars and bolts—the starting points of corrosion—are gone. Easy-to-maintain "Ribbonrail" on this important bridge will cut costs as well as provide smooth, quiet riding.

A Hot Brush

A brush of oxy-acetylene flames prepares a steel bridge for repainting. Paint applied to the warm, clean, dry surface spreads easily, goes on smoothly, and bonds tightly.

Paint lasts longer after this treatment.

P.S. If you'd like to know more about any of these jobs, write to OXWELD. *We'll be glad to send you further information.*

What's News?

► The problem of economical cleaning of car axles prior to magnetic testing has been solved. One oxy-acetylene flame-cleaning unit helps remove scale from 60 axles daily.

► Welded rail for the Cascade and Moffat tunnels received an important treatment to make it last longer -- every foot was oxy-acetylene flame-cleaned prior to the application of a corrosion-resistant coating.

► By reclaiming damaged machines and worn equipment one railroad claims a savings of $22,500 per year. They make the repairs with HELIARC inert-gas shielded-arc welding.

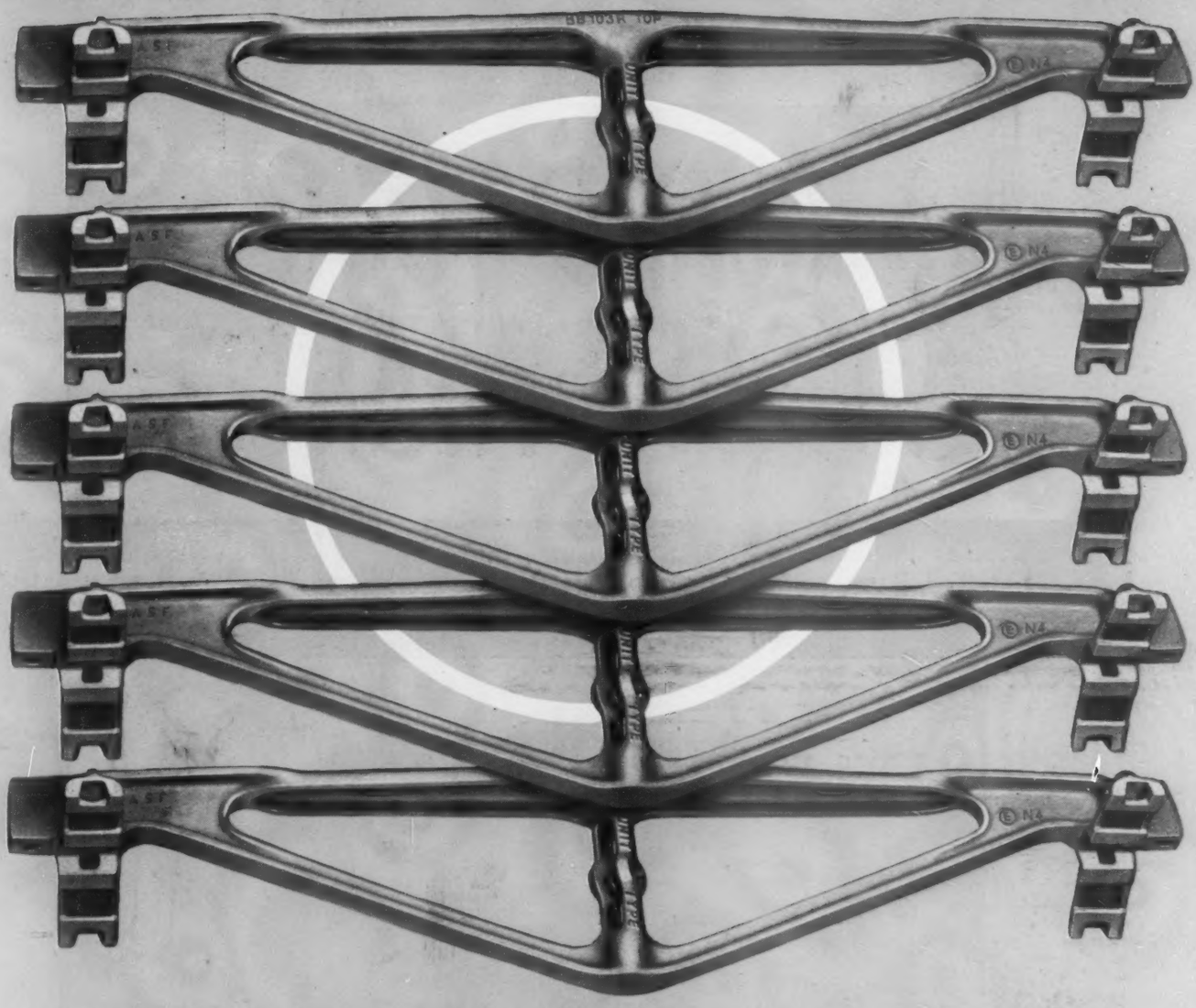
► Light, easy-to-move baffle boxes for rail end-hardening are being used by many leading railroads. With one baffle box, a two-man crew can flame-harden about 400 joints a day. An oxy-acetylene flame quickly produces the desired hardness and pattern on the rail end surfaces.

OXWELD RAILROAD SERVICE DIVISION

Union Carbide and Carbon Corporation

Carbide and Carbon Building UCC Chicago and New York

The terms "Heliarc," "Ribbonrail," and "Oxweld" are trade-marks of Union Carbide and Carbon Corporation or its Units.



Nothing could be Simpler, or Better, than this One-Piece Cast-Steel Beam

Stronger, lighter, one-piece construction makes A.S.F. Cast-Steel Unit Brake Beams ideal for all freight equipment. Heads are permanent, integral parts. They do not depend upon laps, welds, joints, or rivets for rigidity and proper alignment.

Today, after more than three years' use, there's not a single case on record of structural failure or of maintenance due to normal wear. Want more facts about these money-saving, long-lasting brake beams? Ask your A.S.F. Representative.

A.A.R. Approved. Certificate No. 54.

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GUARD YOUR
DIESELS AGAINST...
WHEEL SPIN ... WHEEL
....with the NEW
3 IN 1
AMERICAN BRAKE
SHOE CONTROLLER

The American Brake Shoe Controller gives 3 in 1 protection for diesel locomotives because it:

1. Detects and corrects spin promptly at all speeds.
2. Detects and corrects sliding during braking.
3. Detects and warns if wheel becomes locked.

The American Brake Shoe Controller is not new. Proven through years of service on high-speed passenger car and locomotive equipment, it is now adapted to give 3 in 1 wheel protection on diesel locomotives. American Brake Shoe Company, 230 Park Avenue, New York 17, N. Y.

AMERICAN Brake Shoe COMPANY

BRAKE SHOE AND CASTINGS DIVISION

Passenger train stalled by giant snowdrifts piled along right of way. Thousands of railway travelers throughout middle west were stranded by this January blizzard of 1949. Acme Photo

...IT COULD HAPPEN AGAIN—*MAYBE TO YOU!*

Raging blizzards! Sub-zero temperatures! Giant snow drifts! And stalled trains... with costly delays for railroads and passengers alike. It's terrifying!!!!

Get "all set" for such emergencies. Equip your cars with the Waukesha Diesel Enginator*. This 25 KW power plant supplies *all* electric services —emergency heating, air conditioning, lighting, even cooking and food preservation.

Waukesha Enginators* may be had in either an AC, or a DC system—to operate in parallel as multiple units on individual cars; or all units may be train-lined. Cars can lend or borrow power according to load demands. That means complete reliability with constant, full capacity —winter or summer, day or night—any time, anywhere. You'll want all the details. Send for *new deluxe Bulletin 1496.*

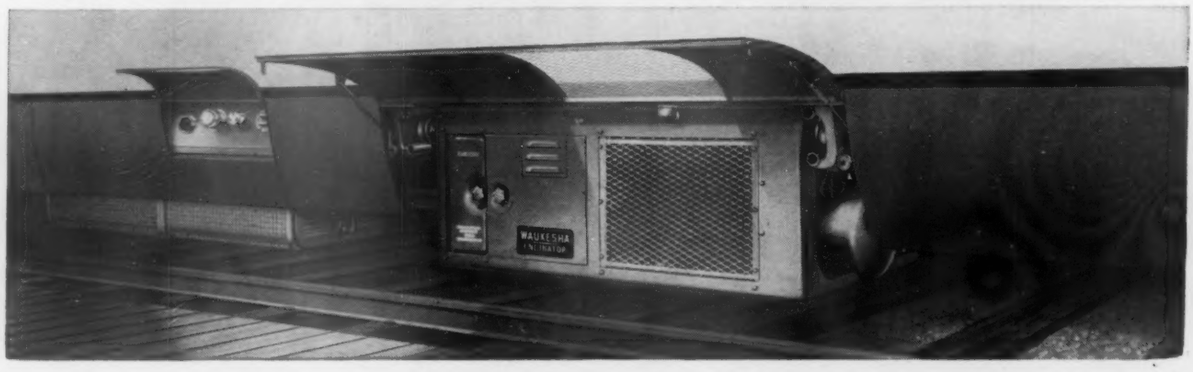
*Reg. U.S. Pat. Off.

RAILWAY DIVISION

WAUKESHA MOTOR COMPANY, WAUKESHA, WIS.

Largest Builders of mobile, engine-driven Refrigeration and Generator Equipment

Waukesha Diesel Enginator* 25 KW, AC or DC, with adjacent 200-gal. Diesel Fuel Tank. Car skirts raised to show roll-out mounting of Enginator* unit.



NOW!

The JACKSON MULTIPLE TAMPER becomes a PHENOMENALLY FAST-EFFICIENT SPOT-TAMPER and SMOOTHING MACHINE!

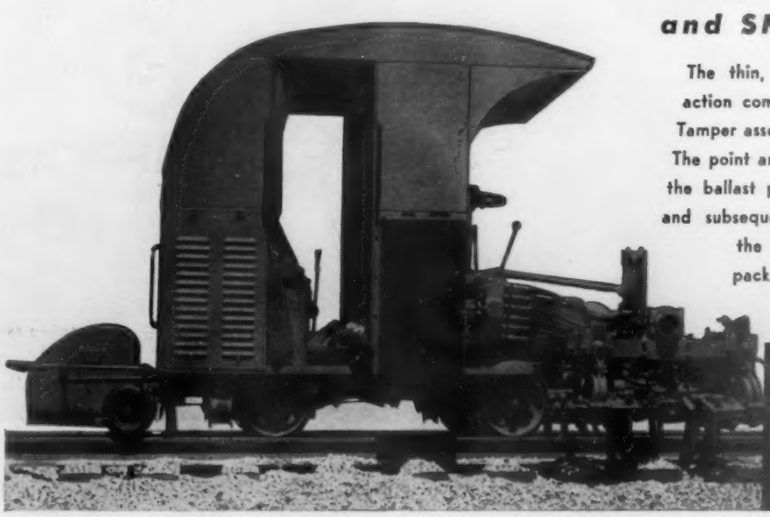
U-651-A BLADE

Now the same **Jackson Multiple Tamper,** which is used for new ballast insertion and out-of-face surfacing operations, can be quickly converted to the most phenomenally efficient, economical machine for spot tamping or smoothing in those operations where there is little or no raise and no additional ballast is spread. All that is necessary is to change to the narrow blades shown here with their newly developed spot-tamping tips.

Not only can far more track be put up in this manner, but much greater uniformity and better consolidation are achieved — assuring smooth track ***that stays up!*** Let us tell you more about this tremendously important, time-and-money-saving application of the Multiple Tamper.

THE KEY TO FASTER, LESS COSTLY – SPOT TAMPING and SMOOTHING OPERATIONS

The thin, narrow spot-tamping tip with its vibratory action combined with the weight of the entire Multiple Tamper assembly, quickly and easily penetrates the ballast. The point and step of the tip pushes and wedges together the ballast particles under the tie, eliminating the voids, and subsequent insertions introduce fine fragments from the ballast section to completely fill and tightly pack the entire bed.



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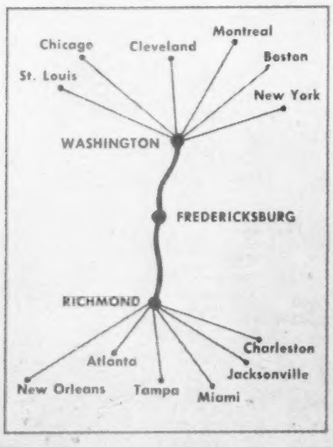

The Richmond, Fredericksburg & Potomac Railroad occupies a unique position in American railroading. It is one of our shortest, and yet one of our busiest roads.

To the RF&P's 116 miles of track, connecting Washington, D. C., with Richmond, Va., converges most of the north-south traffic of the eastern railroad systems. Yet there's no bottleneck here! The RF&P keeps traffic moving "on time" with precise scheduling and intensive maintenance and modernization.

Lately the RF&P has added 30 sleek new Diesel electric locomotives to further speed the shuttle traffic. And Sinclair Gascon Diesel Oils are keeping them operating with top-notch efficiency.

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RICHMOND FREDERICKSBURG & POTOMAC RAILROAD
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Sinclair Gascon Lubricating Oils have achieved the stamp of approval from more than 60 U. S. Railroads. Their service record, in the locomotives pulling heavy freights, as well as in many of the celebrated streamlined trains of today, is outstanding. Inherent in all Gascon Oils is their solvent action that promotes clean engine operation—and their wear-prevention qualities that hold down expensive replacement and maintenance cost.

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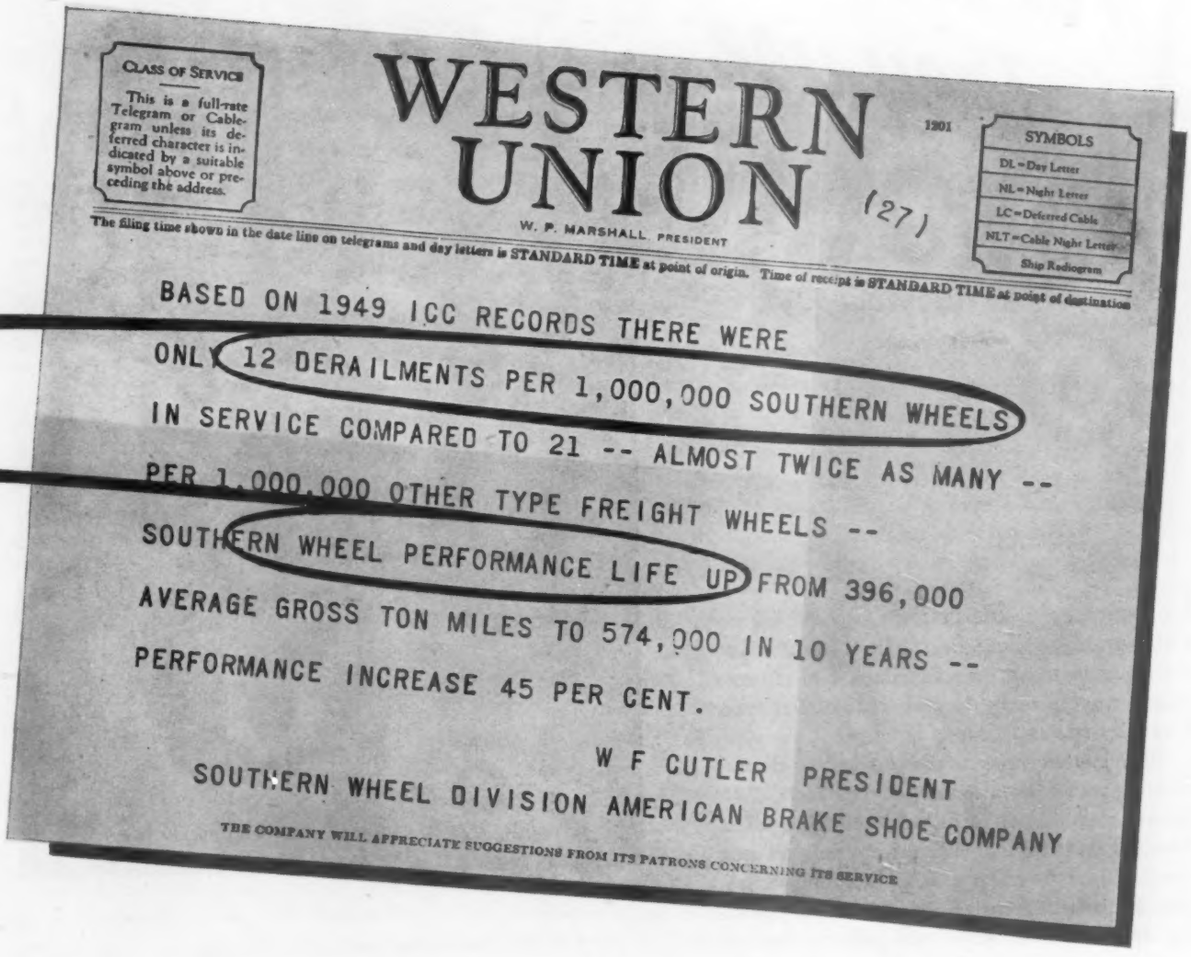

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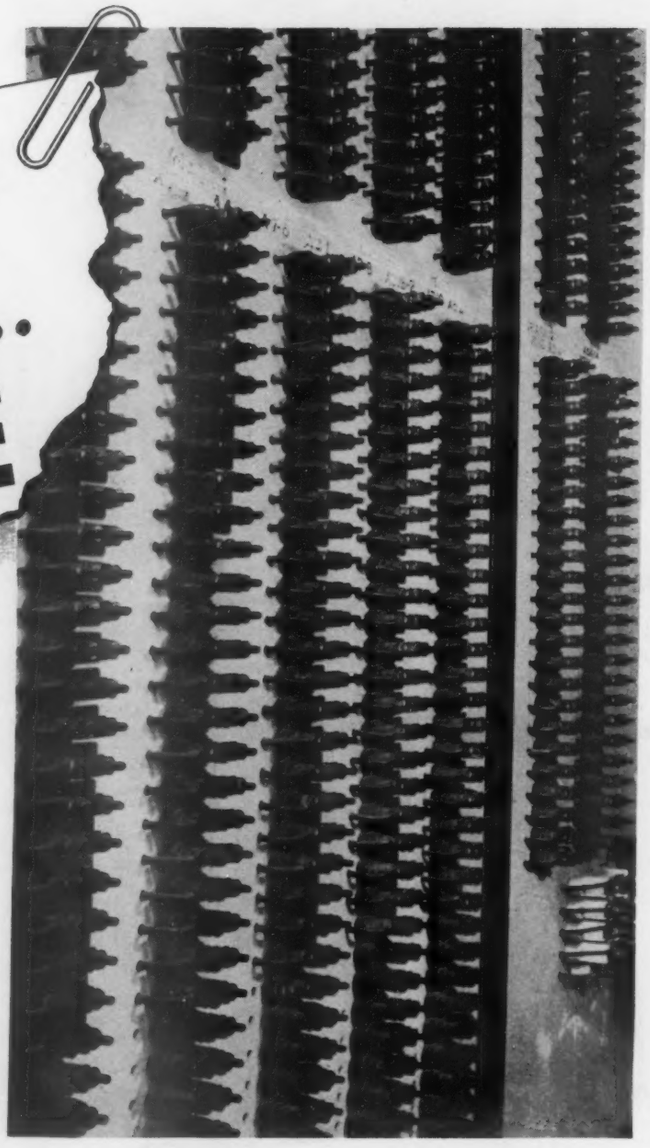

COMPLICATED electrical circuits are certainly no place for cable failure. Such critical installations are common today on many lines, and are one reason why so many leading railroads rely on Okonite wires and cables.

Their confidence is amply justified by the increasing use of Okonite in signal circuits, C.T.C. systems, classification yards, and interlockings. For it is in these fields that enterprising railroad men have realized the full potentials of automatic systems for reducing operating expenses and speeding up traffic, both in the yard and on the road.

Modernization in these operating departments is permitting the reduction of train order offices, the replacement of manually controlled interlockings, the installation of automatic safety devices, and general acceleration of road and yard movement. It's no wonder the railroads are encouraged by the profitable strides being made in these undertakings.

And it's no wonder they are using Okonite on these jobs. Okonite cables are manufactured in accordance with self-imposed standards of workmanship, quality control and materials that are unequalled throughout the industry. Such manufacturing standards as these assure long, trouble-free cable performance... explain the long-established preference for Okonite wires and cables. The Okonite Company, Passaic, N. J.

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TWO RAILROAD PRESIDENTS URGE INCREASED POLITICAL ACTIVITY

The presidents of two important railroads, widely separated geographically, have conveyed to this paper their deep convictions on the current situation of the railroads, and the action they believe to be imperatively needed in the circumstances. The opinions of these two chief executives are strikingly parallel—or, rather, they are complementary to each other—despite the fact that there was no collaboration between them. Here is what one of these railroad presidents says:

"Brick and Mortar" Available

"The railroad witnesses who appeared at the S.50 investigation did a magnificent job. The data and information they collected and submitted were thorough and convincing. They provided the brick and mortar with which to construct the foundation and the framework of a sound national transportation policy. Perhaps it may be wise to build one room at a time. The important thing is to start building. Someone must come up with a legislative proposal designed to correct at least a small measure of the competitive inequalities. If we in the railroad industry do not prepare such legislation, it is conceivable the politicians some day may do so.

"The military strategists contend that a good offense is the best defense. I am convinced that our industry should adopt that strategy. Not only should we start talking about what we are for, but we should prepare a program, legislative or otherwise, to achieve the thing for which we stand. Now is the time to start action. Let's not wait until it is too late. In these trying days when rail transportation is in heavy demand, and the public is disposed to recognize the essential part it plays in our society, we have a favorable climate in which to press our case."

In partial fulfillment of this recommendation, it is appropriate to note in passing that the various "panels" of the Transportation Association of America, including an unusually able and hard-working panel representing the railroads, have been engaged for many months in the development of a program for revision of national transportation policy, and changes in legislation to give effect to a modernized policy. It is too early to predict whether the program the T.A.A. evolves will be sufficiently comprehensive to meet the needs of the situation, but active discussion by railroad leaders among themselves, and with the members of the "railroad panel," of the questions raised by the railroad president quoted above would undoubtedly be most timely and helpful. Meantime, let's see what the other railroad presi-

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dent who has written to us has to say. His views, in substance, are as follows:

"The railroad industry should not expect the Association of American Railroads and the state railroad associations to carry its entire legislative burden. Too many railroads neglect to pull their weight on the political oars because, they insist, railroad management has no political power—it cannot promise to deliver a specified number of votes.

"I do not question the sincerity of those who offer this excuse for inaction—but it is a lame one, nevertheless. The labor leaders, who claimed to control hundreds of thousands of votes, set out to drive Senator Taft out of public life—but it turned out that they could not deliver. The reason they failed was that Mr. Taft had the facts and the logical arguments on his side, and he produced these facts and arguments in honest and simple language for anyone who would listen. He did not talk just to those who already agreed with him—instead he carried the battle into the enemy's camp. The result proved that common sense, candor and hard missionary effort can win more friends and more votes than misleading double talk and name calling.

Work at the "Grass Roots"

"As you pointed out in the November 25 *Railway Age*, Senator Taft's victory affords unassailable evidence of the probability that the railroads also could win their cause if they would work as hard at the 'grass roots' as Senator Taft did—because the 'railroad story' is just as straightforward as, and no more complicated than, the legislative record and program which Senator Taft made the issue in his campaign. What Senator Taft did, the railroads could do too.

"I do not suggest partisanship or anything nefarious. I mean simply that railroad presidents, with the assistance of their subordinates, should make it their business to get acquainted with all federal, state and local officeholders and all the so-called 'opinion leaders' along their lines. They should assure themselves that each of these officeholders and 'opinion leaders' knows the significant facts about the current transportation situation, and what legislative and administrative action is required to restore transportation to economic health."

Is the action recommended by these two railway leaders a responsibility of top management? In any departmentalized business, it is the first duty of every officer to do those things required for the health of the business which no one else can do. There are numerous people on every railroad who can chase cars, supervise the clearing of wrecks, solicit traffic and quote rates, and who are definitely assigned to such work—but there is only one man who can speak with the voice of authority on questions of major public policy; and that man is the president. If he does not interest himself in this activity, then nobody else on the railroad will or can do so effectively. To be specific—Congressman Joe Blow is seldom going to get enlightenment on political questions affecting transportation from a railroad public relations officer or a division superintendent, as long as the president has not let it be known where he stands on these issues and why. Wherever railroad presidents have put forth effort in this direction, they have usually achieved encouraging results.

The country's most distinguished and penetrating student of management problems—Chester I. Barnard, until recently the president of the New Jersey Bell Telephone Company—asserts that an essential function of the chief executive of a large company is to keep the company constantly adapted to a rapidly changing environment. The duties of a chief executive do not parallel those of an operating or traffic officer—i.e., his is not a specialized job having to do primarily with production or distribution. Instead, his main duty is to *establish and maintain cooperation* among all the factors which go together to keep his company functioning successfully.

The factors which have to work together to make a large-scale business successful include labor, investors, customers, and the general public (this latter factor being particularly important in such a highly regulated industry as the railroads). The principal reason why railroading is, on the average, so unprofitable today is that the necessary degree of cooperation from public and political authorities has not been forthcoming. The only way in which the cooperation of this essential factor can be regained is by activity of a kind ordinarily termed "political"—which does not mean that it should involve partisanship or conduct in any way reprehensible. Moreover, since such activity involves questions of policy which cannot be decided by subordinates, the only man in a company who can effectively initiate and direct it is the chief executive.

A GOOD PLACE TO LOOK FOR MONEY-SAVING IDEAS

The man closest to the job in dealing with mechanical equipment is often full of ideas as to how this equipment could be altered to improve performance or reduce expense. For example, an air-brake inspector recently came up with some ideas concerning the application of brake equipment which are interesting enough to deserve some critical attention on the part of management.

This inspector notes that it requires heavy center sills, large angle irons and thousands of rivets to hold a car body together—but that the air-brake system is expected to hold together when one part is mounted on the frame, a second on the center sill and a third on the body. He wonders why the air-brake pipes can be expected to hold up under the same forces and motions that necessitate heavy center sills, angles and rivets to hold the car together. His conclusion: mount the air-brake system as

a package on a strong bracket so that if one part moves, all move.

Should such a development be made, it would benefit the car department by reducing maintenance, and it would benefit the operating department by reducing train delays and set-outs. The final decision as to whether the money that would be spent to develop and apply such an arrangement would bring greater returns than the same amount spent for some other project is a question that a departmental supervisor cannot possibly answer—that is a question in the realm of top management. The idea, however, is worthy of further investigation, because it is a continuing series of such small improvements, rather than a few dramatic changes, that have marked the path of railroad progress in the past and seem destined to do so in the future.

MORE ABOUT THE LONG ISLAND

Our contemporary, Engineering News Record, quite pertinently points out that "it will take more than a change in trustees to solve the troubles of the Long Island Rail Road." On the matter of a larger quantity of safety devices, including automatic stops and speed control, that paper observes that the proliferation of these devices would reduce the average speed of trains on congested lines, making for delays and a declining capacity of transportation facilities which are already inadequate to the traffic load.

A large part of the answer to both safety and overtaxed facilities, the engineering paper contends, lies in additional tunnels under the East river, enlarged yards and station structures, and more running tracks. It sees no easy way of providing these facilities, however, because of the expense, which would "add substantially to the cost of living near enough to New York to work there."

How can it be that there is a shortage of funds to provide improved rapid transit facilities in the New York metropolitan area — when there is so evidently a practically bottomless exchecquer to finance "super" facilities for highway transportation? All over New York City and in nearby territory, high-speed highways have recently been completed or are in the process of development. New bridges and tunnels for motor traffic abound. An enormous modern terminal for the bus lines is just about ready for use. Airport development proceeds at a parallel pace.

Nobody would contend that these rich and abundant new facilities for air and motor traffic are not needed — but the evidence accumulates that additional railroad facilities, particularly those for suburban passenger traffic, are needed too. There seems to be plenty of money and easy financing for all this transportation development—except for that by rail. Why?

The answer, of course, lies in the fact that improvements for highway and air traffic are untaxed, are financed by public credit, and are paid for in part by general taxation—while improved railroad facilities must be financed privately and paid for wholly by charges upon the users of these facilities—who must also contribute to property taxes on these improvements. The reason for the inadequacy of suburban passenger facilities on Long Island, and elsewhere in New York and other comparable metropolitan areas, should be no mystery. These facilities are inadequate because our political leaders "planned it that way." The resigning trustees of the Long Island Rail Road are no more to blame for the shortcomings of that property than General MacArthur is for the military debacle in Korea. In both cases the "planners"—possibly with the best of intentions—initiated the tragedy, but now find it convenient to shift the blame to others if they can.

"Transportation is the common denominator of the enterprise system. It rightfully assumes leadership in bringing all groups and elements of the economy together for collective action on the great issues of public policy involved in the conflict between private enterprise and socialism.

"Over $100 billion of private and government funds are invested in transportation—or nearly one-fifth of the nation's capital values. It is self-evident that whatever happens to these vast public services, in war or in peace, will shape the destiny of America for generations to come.

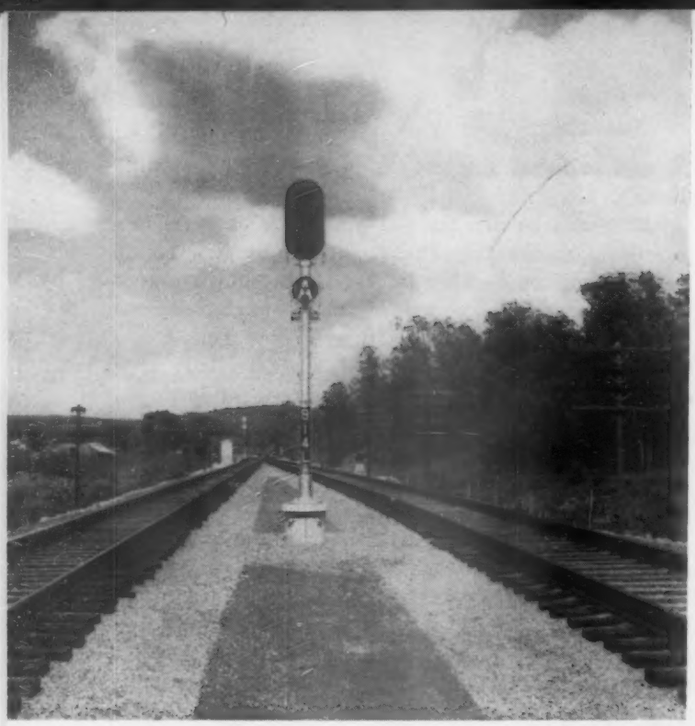
"Transportation is being pushed into nationalization by economic and political pressures. Such a catastrophe would lead to the socialization of public utilities, natural resources, and basic industry. Such is the foremost problem to be solved by all enterprise, lest government ownership of these vast services becomes inevitable. . . .

"The Fabian socialists seek to accomplish by *evolution* that which the Communists have brought about by *revolution.* Through taxation they are drying up the sources of private capital for enterprise—slowly building government domination over the lives and affairs of our people. If Congress should adopt all the socialistic proposals of the welfare state, it would mean an annual drain on the taxpayers of $26 billion on top of the present cost of government and the new defense budget.

"The United States in 1950 is closer to state socialism than was Great Britain at the beginning of World War II.

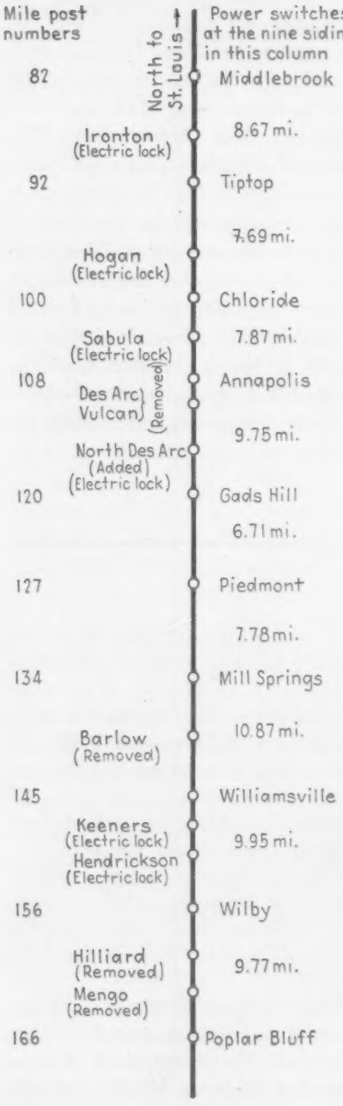
"The time has arrived for all elements of the enterprise system to join hands to deal with the threats to economic freedom and liberty. The [Transportation] Association [of America] offers the nation-wide program for such concerted action."

—From an address by Donald D. Conn, executive vice-president of the Transportation Association of America, before the organization luncheon of the association's Central Maryland Enterprise Council at Baltimore, Md., November 6.



New C.T.C. To Remove

Although only nine sidings of the original 19 are equipped with centralized traffic control, train operation has been improved and track capacity increased

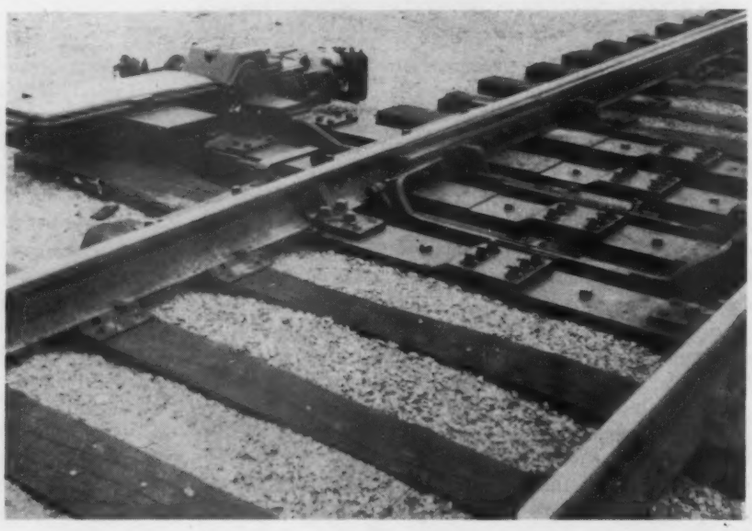


Above — Tracks at 20-ft. centers allow room for main-track signal between main track and siding at north end of Tip Top

Right—Flood detector with controller box open

Below — Heavy plates, braces and rods are used on the power switches

Left — Diagram showing locations of sidings



Allows Missouri Pacific Half the Sidings in 82 Miles

On 82.6 miles of single-track main line between Middlebrook, Mo., and Poplar Bluff, the Missouri Pacific has superimposed on its automatic block signaling a centralized traffic control system which includes power switches and signals at both ends of nine sidings. This new signaling is a part of an overall program of improvements, including grade reductions, outlined in an article in the January 21 *Railway Age*. As a result of the signaling and track betterments, train operations have been improved and track capacity has been increased.

Train operations are handicapped by numerous grades and curves in this territory where the railroad passes over the Ozark mountains of southern Missouri. Poplar Bluff, the south end of the installation, is 341 ft. above sea level. From Poplar Bluff northward the railroad ascends gradually with low grades for 39 miles to Piedmont, at 500 ft. elevation. From Piedmont, the grade ascends at varying rates up to 1.62 per cent for 7 miles to Gads Hill, at 834 ft.; descends to 570 ft. at North Des Arc; and ascends at light grades for 12 miles to Glover. From that point, the grade ascends at varying rates to 1.25 per cent for the 6 miles to Tip Top, at 1,117 ft.; descends for 4 miles to Ironton, 905 ft.; and then ascends for 5 miles to Middlebrook at 1,150 ft. Thus, the line is uphill and down over the mountains most all the way between Poplar Bluff and Middlebrook.

Curves are numerous, and, for the most part, range under 2 deg., but some are between 3 deg. and 4 deg., and the maximum is 5 deg. 29 min. This track is well constructed with heavy rail and good ties and ballast, so trains may be operated at maximum speeds consistent with restrictions for curves and grades. The maximum permissible speed is 50 m.p.h. for freight trains, and for passenger trains 55 m.p.h. to Milepost 119 and 60 m.p.h. south thereof. Speeds are restricted on numerous curves, so that the average speed is reduced.

Poplar Bluff is an important junction on the Missouri Pacific lines through route between St. Louis, Little Rock, New Orleans, Texarkana, Dallas, Houston, San Antonio and Brownsville. The new C.T.C. territory between Poplar Bluff and Middlebrook is the southern half of the 165-mile direct route over the mountains to St. Louis. This line handles all the passenger trains, as well as some freight trains, totaling 7 passenger trains each way daily; a "red ball" freight each way daily; and a local freight each way daily except Sunday. The other freight trains between St. Louis and Poplar Bluff are operated over a longer line—204 miles—at low grade which follows the east side of the Mississippi river from St. Louis to a bridge over the river at Thebes, and then across flat bottom lands to Poplar Bluff.

On the 82.6 miles of single track over the mountains between Poplar Bluff and Middlebrook the major objective of the installation of centralized traffic control is, therefore, to save time for passenger trains, and especially to minimize delays if any trains are behind schedule. In the past, the consist of one through freight each way daily over this route has been limited to merchandise and other high-class traffic originating in St. Louis or from western connections to be moved south; or, northbound, for delivery in St. Louis or to connections west. As a result of the recent extensive improvements in grades, the increased flexibility brought about by the C.T.C., and the use of diesel-electric locomotives, there is a possibility that more through freight trains now can be operated over this shorter route without interfering with passenger trains.

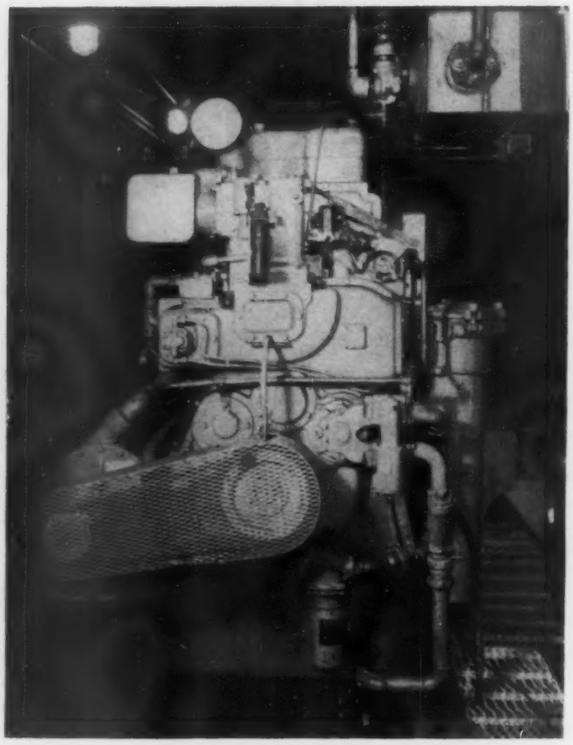
The new C.T.C. installation includes power switch machines and signals at both ends of nine sidings at Wilby, Williamsville, Mill Spring, Piedmont, Gads Hill, Annapolis, Chloride, Tip Top, and Middlebrook. Ten existing sidings were discontinued, 5 being removed entirely, while the balance were shortened, and one new short track (North Des Arc) was installed, for use by local freights serving industries. The 27 main-line hand-throw switches in this territory are equipped with electric locks. One of the power sidings—at Piedmont—has a capacity of 106 cars, and the eight other power sidings were lengthened to 80 cars. Where practicable to do so, the power sidings are spaced on a time-distance basis for trains. On the heavy grades, the distance between sidings is about 7 to 8 miles, whereas on easier grades, where trains can run faster, the sidings are spaced about 9 to 11 miles apart. The control machine for this C.T.C. territory is in the dispatcher's office. On the illuminated diagram, each of the sections corresponding to main line between two sidings has two occupancy lamps, each of which is lighted to indicate occupancy of its corresponding track section.

The signals on this C.T.C. territory are the color-light type, arranged to display standard Association of American Railroads Signal Section aspects. Each absolute signal is so designated by a reflectorized marker displaying the letter "A." Each signal is at the immediate right of the track governed. At one end or the other, each siding is thrown over to 20-ft. centers to allow clearance for the main-track station-leaving signal. At these power switch layouts, the turnouts are No. 16 with 30-ft. switch points, permitting train speeds of 30 m.p.h. entering or leaving the sidings.

In years past, cloudbursts in nearby hills have caused flash floods which resulted in damage to the track at unexpected places. For this reason, flood detectors have been installed at several locations in this territory. These detectors are on posts set in the fill along the track. If water comes up to this level, the float in the bottom housing is raised, operating an up-and-down rod that opens contacts in the controller in the case at the top. Such an operation sets the signals, in each direction, to display the red aspect.

This installation of centralized traffic control was planned and installed by railroad forces under the direction of L. S. Werthmuller, signal engineer. The principal items of signal material were furnished by the General Railway Signal Company, and the flood detectors by the Western Railroad Supply Company.

North Western Builds Diesel Rail Motor Car



The engine and expanded-metal floorboard are mounted four inches above the coverplate for easy cleaning

The Chicago & North Western has completed an extremely modern-appearing and comfortable diesel-electric motor car at a cost of $36,000. Designed and built at the road's Kinzie street shops in Chicago, the car affords complete passenger train service with seats for 28 passengers, a mail and a baggage compartment. The car is powered by a 6-cylinder 4-cycle Sterling diesel engine with a Buchi supercharger which delivers 300 hp. to the traction motors. It is designed for normal operation with one trailer in either secondary-line or commuter service. The first assignment will be on a branch line between Madison, Wis., and Lancaster.

The car has a length of 83 ft. 6 in. over couplers, a width of 9 ft. 11⅜ in. over the cowling sheets, and a height of 14 ft. 5¼ in. above the rail. It has a top speed of 60 m.p.h. and a weight of 140,000 lb., with approximately 45 tons on the front truck and 25 tons on the rear truck. Four-wheel trucks are used, with only the front truck powered. Fafnir oil-lubricated roller bearings are used on all wheels of both trucks.

The car was converted from an existing gas-electric rail car which was in need of extensive repairs. The existing generator, type DT-516-A, 450-volt, 200-kw., was repaired by the railroad and sent to the factory for mounting to the diesel engine. The existing traction motors, type 292A, were reconditioned and mounted on different trucks. New side sills and side plates were applied from the mail-room front partition to the back end of the car. From this partition forward there is an entirely new underframe. The old center sills and side sills were cut at this point and all holes plug welded. The same was done with the side sills. The new sections were riveted to the old through splice plates.

A one-piece steel underframe coverplate, 11 ft. 11⅛ in. long, 9 ft. 3 in. wide and ⅜ in. thick, was applied under the entire engine compartment. Expanded metal floorboard for gangways is mounted four inches above the coverplate, giving a space that can be easily hosed out and kept clean. The engine is mounted on 14 Korfund Vibro-Isolaters with shear lugs for horizontal shear and switching shocks. Over the engine compartment is a hatch 11 ft. 10⅜ in. long providing a total opening 11 ft. 6⅞ in. long. The hatch can be removed in 15 to 20 minutes.

The nose is fabricated of ⅛-in. steel below the windows and 12-gage steel above the windows. The car is designed to meet all Railway Post Office requirements. Met-L-Wood partitions are used between the engine compartment and the operator's cab. Insulated metal partitions separate the cab and the mail room, the mail and the baggage room, and the baggage room and the passenger space. Adlake breather sash are used for the front windows and standard sash for the remainder. Control is by a hydraulic throttle. New Young radiators were mounted on natural rubber in shear.

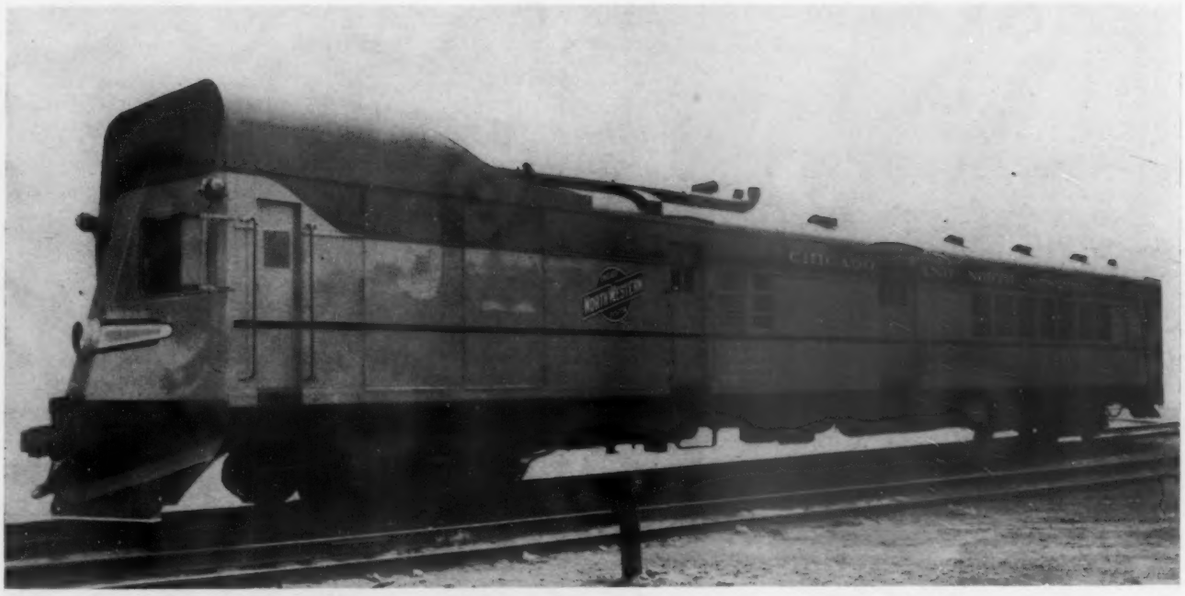
The cast steel trucks were taken off another motor car, the center plate and side bearings being changed to suit the new installation. The front journals are 5½ in. by 10 in., and the rear journals 5 in. by 9 in. In the interior of the car the wash rooms were enlarged; a luggage storage compartment was installed in the rear; the old smoking compartment was removed; new upholstered, walkover-type coach seats were substituted for the old bucket type; a new floor was laid; the number of lights was doubled; and a 426-amp.-hr. battery was installed, the latter being charged from the exciter through a voltage regulator and a reverse-current relay.

A water heating system and a hot wash-water system are supplied from a 150-gal. storage tank, which is also piped to provide make-up cooling water to the engine in emergency, and to furnish cold wash water and toilet flushing water.

Water for the hot-wash-water circuit is drawn from the 150-gal. tank to a 20-gal. storage tank through a system of check valves. In passing to the storage tank it receives its heat from the engine cooling water through a heat exchanger in the cooling-water system. The hot wash water is in a closed circuit and is recirculated by a 1/6-hp., motor-driven pump which derives its power from the exciter. This arrangement makes hot water available at all times. Even when large quantities are drawn the chill is taken off the cold make-up water in passing through the heat exchanger.

A Baker coal-fired hot-water boiler located in the baggage compartment and tended by the baggageman supplies hot water for train heating. This water is circulated by a second 1/6-hp. pump in the baggage compartment. The car heating system is controlled by an aquastat set at 120 deg. on the return water side of the circuit.

Supplies carried on the car include 375 gal. of fuel oil, 65 gal. of lubricating oil, 190 gal. of engine cooling water and 8 cu. ft. of sand.



Diesel motor car rebuilt from a gas-electric can pull one trailer and affords complete passenger train service

The interior of the car is attractive and comfortable

Transportation as an Outlet for Investment

By JULIAN S. DUNCAN
Chairman, Department of Economics
University of New Mexico

There is general agreement that investment plays a key role in determining the level of economic activity. It is estimated that ten cents out of every dollar the consumer spends this year will be for transportation. The Twentieth Century Fund further estimated that transportation capital expenditures of $6.3 billion were needed in 1950 for high-level employment. On this basis, approximately one-fifth of the capital investment of $34.4 billion required for high-level employment is for transportation. It therefore becomes a matter of real significance to have the optimum investment in transportation facilities. It is the purpose of this paper to examine some of the national policy factors affecting the level of transportation investment.

Investment in transportation facilities is complicated by the fact that a substantial part of it is made by governments—federal, state and local (i.e., highways). The privately owned segment of overland transportation, the railroad industry, is currently contending that the manner of financing highways is inequitable and results in the curtailment of their earnings and limits new investment in railroads. They further believe that current highway financing contributes to an uneconomic division of the transportation business as between themselves and their competitors. Inasmuch as estimated annual need for railroad investment under conditions of high-level employment is one billion dollars, or approximately one-sixth of the transportation investment total, it follows that this controversy merits consideration.

This article is a condensation of a paper presented by Professor Duncan at the recent session of the Pan American Railway Congress in Mexico City.

The problem of financing highways may be considered from three standpoints: (1) the distribution of highway costs as between abutting property owners and highway users; (2) the distribution of highway costs among highway users; and (3) the equivalent of a general property tax for highway users.

Distribution Between Highway Users and Abutting Property Owners.—The question is not simple even where one is considering only primary arterial highways. Owners of abutting property, particularly business property, tend to gain from the fact that they are so located. The problem becomes still more complex when one considers the secondary rural roads and city-access highways. A great many different percentages have been evolved by those who have studied this problem. It would seem that the two most important criteria should be: (a) benefits received, and (b) ease of calculation and application. Griffenhagen & Associates have made a suggestion which seems to meet the criteria above set forth. The principle they propose is that highway users should pay costs above "a minimum standard necessary to give abutting

property owners reasonably good access to their properties." It may be pertinent to point out that the abutting property owner who benefits by the primary highway ordinarily has that benefit reflected in a higher general property tax on his property.

From the standpoint of theory, this method seems to afford a consistent logical basis for apportioning costs as between highway users and non-highway users. Highway users should not be required to pay for that portion of highway costs which is necessary to give the property owners reasonably good access to their land. A still more cogent reason for using this method is that it can be applied with a minimum amount of computation.

Distribution of Highway Costs Among Highway Users. —The theories of allocating costs among the various types of highway users, assuming that a decision has been made as between abutting property owners and highway users, may be classified into two general categories: (1) cost of service, and (2) value of service.

Proponents of the cost of service approach tend to stress the fact that this is a government undertaking for the welfare of the people, and, therefore, cost of service should be the principal criterion. This leads them to stress type of highway required, the space occupied by each type of vehicle, and the wear and tear resulting. For two-lane highways adherence to this approach should also consider the amount of friction caused to the smooth flow of traffic by heavy trucking combinations. For example, a vehicle which is not able to maintain average speed on a hill should pay a higher proportion of costs because it slows all traffic.

New Studies Required

The American Automobile Association's conclusions regarding the Pennsylvania Turnpike, observations by C. L. Motel of the Minnesota State Highway Department, based on considerable national highway travel, and statements by Governor Roy J. Turner of Oklahoma about the situation in his state, support the hypothesis of widespread damage by heavy trucks and trucking combinations.

These highway damage data have been cited not so much in support of a theory of cost of service, but rather to indicate that much of the previous work on highway costs is dated, and that new studies are required in the field of the distribution of highway costs among various types of highway users.

The theory of the allocation of highway costs among highway users on the basis of value of service principles [i.e., rather than cost of service] seems to the writer to be preferable for a number of reasons. First, the demands on the budgets of local, state and federal governments are now and will be so heavy that no available source of revenue should be neglected. The investment in highways may be made a profitable one. Considering other demands, it is argued that this investment should be made to yield the maximum return. Second, the cost of building and maintaining adequate and safe highways is very great. Both economic principles and concern for the public safety impel us to regard much of our present highway system as obsolete. The joint committee on the Economic Report believes that an expenditure of $55 billion spread over a period of ten years may be required to bring our highway system up to a desirable standard of efficiency and safety. In view of the other pressing demands on the budget, every effort should be made to make this needed new investment pay its own way. Third, users of highways, and particularly commercial highway transportation, are competing with a privately owned medium of transportation which not

only pays the maintenance and capital charges on its right-of-way but, in addition, pays thereon a general property tax.

If value of service be accepted as the principal criterion for distributing user payments among highway users, then it should be relatively easy to decide on the method which would most accurately measure value of service or, if you prefer, benefit. The gross-ton-mile, which measures not only the weight of the vehicle but the distance traveled, seems to fit such a standard.

The most weighty criticism of the gross-ton-mile tax as the measure of collecting highway user payments is that it would be impossible to administer it. However, there are well-informed highway department officials who believe that it can be done. Griffenhagen & Associates, who specialize in administration, lend the weight of their authority to this view.

"Not Inconsiderable Subsidy"

The Bureau of Public Roads has recently published estimates of total gross ton-miles traveled by single-unit three-axle trucks and combinations. The bureau has been estimating intercity ton-miles of freight by highway for over a decade. The writer has had two statistical assistants check the probable error in a computation of user payments and highway costs for truck and truck combinations recently made by the Association of American Railroads. My assistants' recalculation of the A.A.R. figures shows that, allowing for all sampling errors, the maximum paid by the heavy trucks of their share of total highway expenditures in 1947 was 31.0 per cent. The state of Illinois has been arbitrarily selected by the author as typical. The study made by Griffenhagen & Associates allocates 44 per cent of the highway improvement costs in that state to non-highway users. It is therefore logical to assess the highway users for the remaining 56 per cent, and to allocate this amount on the basis of the gross ton-miles traveled. Carrying out these computations we find that the large trucks are paying only 56 per cent of their share of highway expenditures. This is a not inconsiderable subsidy.

A General Property Tax Equivalent for Highway Users. —A transportation policy for an expanding economy would seem to further require that highway users pay the equivalent of a general property tax. Under present conditions even if it be assumed that highway users pay

the equivalent in user payments of maintenance and construction costs of that part of the highways which may be reasonably attributed to them, they still will have fallen short of what the railroads pay on their rights-of-way. The railroads not only pay for the construction and maintenance of their ways, but, in addition, a general property tax upon them. A policy of giving each transportation medium the traffic which it is best qualified to carry suggests that the equivalent of a general property tax payment for that portion of the highway used by them be levied against each type of highway user. Some advocates of a general property tax equivalent have suggested that these payments be made only by commercial users. However, the private passenger automobile and the light truck are possibly now paying the equivalent of this tax. Assuming that this is true there seems to be no conclusive argument why these should not continue to do so.

Once agreement has been reached on user payments to balance highway costs, it should not be too difficult to arrive at a defensible figure for the general property tax equivalent. As previously indicated with regard to the distribution of user payments, the gross-ton-mile provides the most logical measure upon which to base a computation of the general property tax equivalent. On the basis of this reasoning, the movement to insert constitutional amendments against so-called "diversion" is disapproved. The very word "diversion" implies a prejudgment of the case. Why should not a highway transportation system on which large sums of money have been and will be expended be made to yield a surplus to the hard-pressed treasuries of federal, state and local governments? The technical superiority of the truck for short-haul transportation is such that the trucking industry would probably continue to expand while paying user charges on a gross-ton-mile basis, plus the equivalent of a general property tax. The construction of the modern highways assumed to be necessary in this report would also improve the competitive economic position of the trucking industry.

Railway Consolidation

The available evidence suggests that the railroads will be unable to provide the necessary level of investment unless there is far-reaching consolidation of lines and systems. W. M. Leonard estimated the savings from consolidation as of the order of magnitude to $500 million a year. Some estimaters put the figure at $250 million a year.

The clearing up of a common fallacy regarding the strong and weak road problem would definitely speed the desired consolidation. The 1920 Transportation Act required the Interstate Commerce Commission to consider the carriers as a whole in making rates; the strong along with the weak. Specific legislative authority for the division of returns from joint hauls on the basis of financial need rather than relative miles hauled is found also in the 1920 act. The assumption of the legislation would appear to point to government ownership because only under government ownership can one logically justify the practice of using the profits of the strong lines to make up the deficits of the weak ones. The same fallacy was continued in the provisions for railway consolidation. A part of railroad management's opposition to compulsory consolidation would seem to stem from the implicit assumption that the strong roads would be required to absorb the weak at a price approximating the par value of all the weak roads' securities. Such a requirement would be logical and proper if the roads were publicly owned. This type of shotgun wedding does not, however, seem to be consistent with private ownership. The act should explicitly state that strong roads would not be compelled to take over weak roads at prices in excess of the average market value of their securities.

Changes Required for Equality

National defense may call for continuing subsidies in the field of air transportation and ocean shipping. The subsidies should be openly labeled as such, however, in order that the public and Congress may know their amount.

A primary necessity, therefore, is that the Congress declare that equality of treatment of all media is fundamental policy. The introduction to the Interstate Commerce Act instructs the I.C.C. to treat all media of transportation alike and to weigh effects upon all media when making decisions about any one. By implication, this introduction would seem to require the commission to also regard effects upon aviation, but the I.C.C. has no powers over aviation, and hence any such inference from the declaration of transportation policy would be academic. It is believed that a legislative statement calling for equality of treatment needs to be accompanied by the putting of all quasi-judicial and quasi-legislative functions within one single transport regulatory commission.

Summary and Conclusions

The elasticity of the demand for transportation, particularly passenger transportation, is one of the reasons for stressing the importance of transportation as an outlet for investment for high level employment. The amazing increase dating from approximately 1916 in the number of miles of intercity passenger transportation per thousand of population is an impressive illustration of this elasticity. It is not beyond the possible that the next 30 years will see a comparable increase in the intercity and international miles of air travel. A national income level of $300 billion per year would give also a profitable level of ton-miles of freight for both railroads and trucking companies.

Equality of treatment of all media of transportation is the best method of stimulating the optimum investment and employment in this and related industries. It is concluded that highway transportation as a whole, and heavy trucks and trucking combinations in particular, are not paying their own way and that this inequality is resulting in an uneconomic division of transportation business between trucks and railroads. The railroads, for their part, need to give more study and effort to meeting the conditions arising from new kinds of competition. Among the things they could do would be to increase the speed of freight service, to seek to met the need for specialized services such as that now offered by the owners of refrigerated trucks, and to offer better passenger transportation with more frequent schedules. The railroads should consider lowering costs and rates as a better method of solving their problems than raising rates. The new diesel rail passenger car is an example of what the railroads could do in offering more frequent schedules to offset the inroads which the buses have made. The Shasta and California "Daylights" are good examples of railroads making money from quality service at low rates. There are many savings which the lines could make from consolidations and integrations of service, from pooling of services and equipment, even under existing legislation. Perhaps most important of all a compulsory railway consolidation act is needed.

G. M. & O. Develops Better Icing Record

Five-part form moves with waybill; replaces three older forms; simplifies record

A G.M.&O. agent fills out icing record. Agents or yard offices number each form issued, starting with number 1 and continuing consecutively to the end of the year

In order to simplify its icing records and make them more accurate, the Gulf, Mobile & Ohio has devised a five-part form, with carbon interleaved, which replaces three former records. This form moves over the road with the original waybill and is marked at each terminal where icing services are provided. There is a space, too, for conductors to record the time and place of any change in the position of the plugs and vents of the refrigerator car. At each terminal where cars are iced the agent fills out the form, detaches the bottom copy for his file and sends the other copies on to the next station with the waybill.

If more than three G. M. & O. stations are involved in icing the car, the fourth agent or yardmaster must record the service on the original form but make a single sheet copy for his file. This is because the original sheet which shows the complete record of the services performed must go to the office of the auditor of receipts, while the first carbon is sent to the superintendent of transportation. If more than five terminals are involved in the icing, the sixth station must make out a second set of the forms to provide a copy for its record. This second set of forms then is attached to the first and goes through to destination with the shipment. Completed records are sent to the auditor of receipts and superintendent of transportation daily.

GULF, MOBILE AND OHIO RAILROAD CO.

REFRIGERATION AND VENTILATION RECORD ON CARLOAD PERISHABLES

FORM 992

REPORT NO. _____

SHEET NO. _____

CAR INITIAL AND NO.	ROAD REC'D. FROM	JCT. RECEIVED AT	COMMODITY	WAYBILL NO. AND DATE	BILLING ROAD	FOR AUDITORS USE: SETT. ROAD	AS SETTLED
ORIGIN	DESTINATION		MAKE BILL AGAINST			ACCTG. NO.	AS AUDITED
WAYBILL INSTRUCTIONS IN FULL						TOTAL INDEX	ADD. DIFF.
							DED. DIFF.

TERMINAL AND ADVANCE WAYBILL NUMBER		TRAIN NO.	TIME	DATE	POSITION VENTS	POSITION PLUGS	AMOUNT OF ICE IN TRANSITU	TONNAGE STOPS	FOOD CUST	LBS. ICE FURNISHED	LBS. SALT FURNISHED	ICED DATE	ICED TIME	TARIFF CHARGES ICE	TARIFF CHARGES SALT	TARIFF CHARGES TOTALS	SIGNATURE
TERM.	RECEIVED													RATES			
W/B NO.	DEPARTED													AMOUNTS			
TERM.	RECEIVED													RATES			
W/B NO.	DEPARTED													AMOUNTS			
TERM.	RECEIVED													RATES			
W/B NO.	DEPARTED													AMOUNTS			
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W/B NO.	DEPARTED													AMOUNTS			
TERM.	RECEIVED													RATES			
W/B NO.	DEPARTED													AMOUNTS			

INSTRUCTIONS

AGENTS AND YARD OFFICES: FORM TO BE FILLED OUT BY ONCOMING JUNCTION OR AT G M & O ORIGINATING STATION. EACH SUBSEQUENT TERMINAL MUST FILL IN THEIR RECORD OF HANDLING AND DETACH COPY FOR THEIR RECORDS. ORIGINAL AND FIRST COPY MUST ACCOMPANY WAYBILL TO DELIVERING JUNCTION OR DESTINATION (WHEN A LOCAL POINT) WHERE THEY WILL BE MAILED TO THE AUDITOR OF RECEIPTS AND SUPERINTENDENT OF TRANSPORTATION RESPECTIVELY.

CONDUCTORS: SHOW TIME AND PLACE YOU MAKE ANY CHANGES IN VENTS OR PLUGS, AND ALSO INDICATE ON FORM IF CAR INVOLVED IN ACCIDENT OR RECEIVED ROUGH HANDLING.

Form 992, "refrigeration and ventilation record on carload perishables"

West approach of the Huey Long bridge. The structure, which cost $13,000,000, and is nearly 4½ miles long overall, is owned and operated by the New Orleans Public Belt Railroad and is used by the Texas & New Orleans, the Texas & Pacific, the Missouri Pacific, and the Texas Pacific-Missouri Pacific Terminal Railroad of New Orleans

Huey Long Bridge Gets Aluminum Deck

Covering now being applied to this structure across the Mississippi river near New Orleans is expected to provide lasting protection against fire and corrosion

To protect the Huey P. Long bridge across the Mississippi river near New Orleans, La., against possible damage from fire and corrosion, the original deck covering of galvanized material, no longer fully effective, is being replaced with aluminum. In connection with this work, which has required the solution of unusual design and other engineering problems, a general rehabilitation of the deck is being carried out, including tie and guardrail renewals and the installation of continuous welded rail across the bridge.

The double-track Huey P. Long bridge was constructed during the depths of the depression at a cost of approximately $13,000,000. Owned and operated by the New Orleans Public Belt Railroad, it is 4.35 miles long and in plan roughly forms an elongated "S." The railway tracks follow a vertical curve over the 790-ft. length of the main span and then descend on a grade of 1.25 per cent in either direction. The Texas & New Orleans (part of the Southern Pacific Lines), the Texas & Pacific, the Missouri Pacific, and the Texas Pacific-Missouri Pacific Terminal of New Orleans are all user lines that operate across the bridge and over the tracks of the New Orleans Public Belt to expedite the movement of passengers and general freight into and out of New Orleans.

Better Decking Material Sought

Planning for the present redecking project began in 1943, when it was determined by routine inspection that the galvanized steel sheets placed over the ties and under the rails when the bridge was completed in 1935 would provide adequate protection for only a few additional years. The engineering firm of Modjeski & Masters,

Left—In the background the new aluminum decking is in place. The original galvanized-steel deck covering, as it appeared before the deck rehabilitation work was undertaken, is in the foreground. Right—Applying asphalt mastic to the ties before Plate I (see diagram on next page) was placed in position between the guard rails

Below—Installing chairs for Plates G and H after Plate I

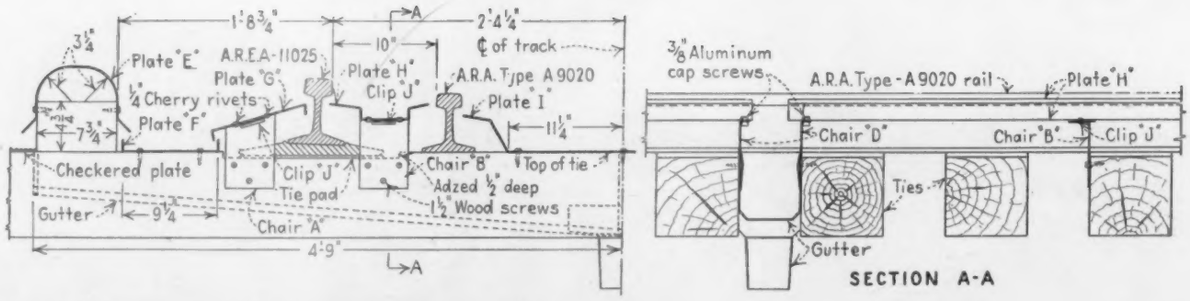
which designed the bridge, then undertook the task of locating a longer-lasting material for the deck than the galvanized steel sheet originally installed.

The material selected for this purpose had to be completely fireproof, as it would be required to protect the creosoted pine bridge ties from hot ash, fire bricks, or hot brake shoes that might be dropped from passing equipment. Reducing corrosion of the structural parts of the bridge beneath the deck was also of prime importance. Hence, a function of the decking would be to ward off the highly-corrosive attack of brine drippings from refrigerator cars, as well as sewage from passenger cars. Even the slow corrosive action of the elements was taken into consideration.

Numerous manufacturers of a wide variety of different types of sheet materials were requested to furnish specimen sheets to be used as test panels on the railroad deck for an indefinite time. These materials underwent actual service tests ranging from three to four years. After the testing period was completed and the results compared, it developed that, corrosionwise, all the aluminum panels tested were in very good condition. Alclad 4S and 52S sheets were selected as the most suitable materials for the purpose. Ultimately, Alclad 4S was specified for the decking.

Requisites Outlined

While the test was in progress, the designers, aided by the engineering departments of the user lines and by additional engineering services furnished by the Aluminum Company of America, approached the project from the design angle to determine the requisites to be



Design and arrangement of the overlapping aluminum sheets being installed on the Huey Long bridge

Positioning Plate H at a drain trough

fulfilled before undertaking actual application of the decking to the bridge. Regardless of the outcome of the test, there were roughly six major design problems that had to be solved:

1. A continuous deck was needed to provide protection for the ties and the supporting steel structure below.
2. Adequate control of drainage from the decking was necessary.
3. The deck had to be designed for "on location" assembly and without the need for special metalworking equipment in the field.
4. The deck had to consist of sections which could readily and quickly be removed when ties are to be inspected or replaced.
5. The design had to permit the continued use of the established railroad block signal system and the making of new provisions for broken-rail protection.
6. Freight and passenger traffic had to be maintained while the decking was being placed.

To give the bridge and the track structure complete protection from guardrail to guardrail, a series of overlapping aluminum sheets, formed in the manner shown by the drawing and photographs, was designed. The only surface gaps in the decking from one end to the other are at the drain troughs than run perpendicular to the rails. These troughs are placed at approximately 120-ft. intervals along the deck to provide an adequate number of collection points for deck drainage. Fitting snugly down between two adjacent ties, each trough conducts the runoff of brine, water, etc., from the decking, and funnels it through an elbow and downspout pipe 4¼ in. in diameter. Since the downspouts are located to clear the steel girders and floorbeams of the bridge and extend 8 ft. below the bottoms of the ties, there is no opportunity for the brine to come in contact with any of the structural steel.

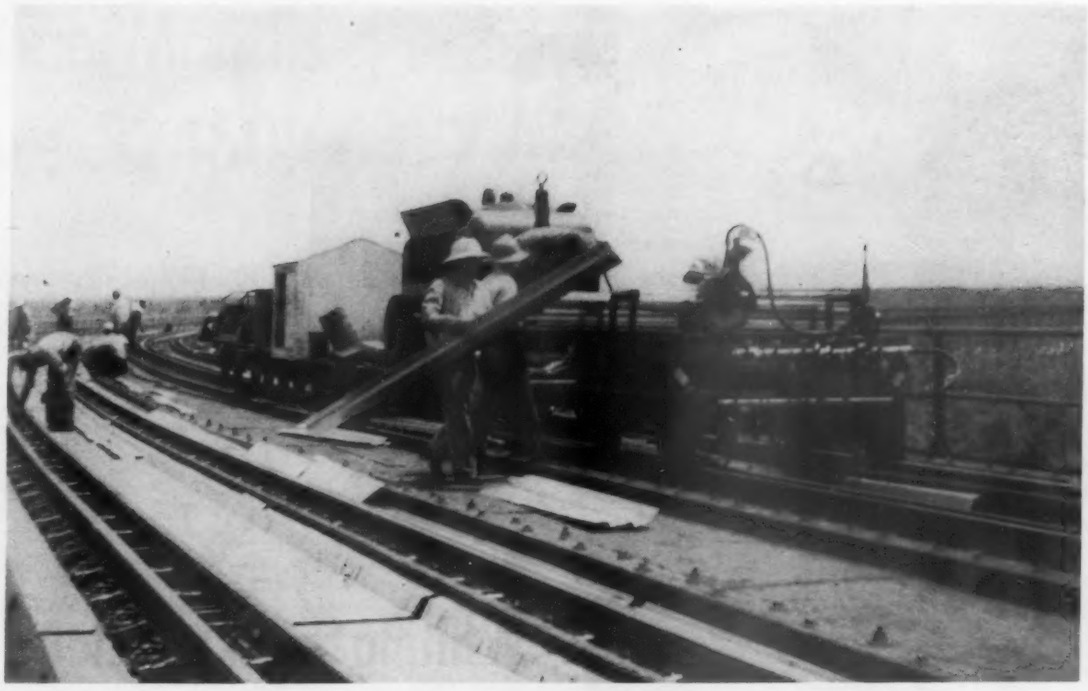
Continuous Rails Installed

Before the new aluminum decking could be placed, the badly corroded galvanized steel sheets had to be removed. Simultaneously, a program of general tie, track, and guardrail rehabilitation was put into motion. The running rails were first removed from the bridge, cropped and welded into lengths of approximately 1,000 ft., after which they were brought back to the bridge on push cars and replaced on the original tie plates. These lengths of the original rail were alternated with similar lengths of new rails which were needed to make up for the cropping and old rails that were culled out because of wear or other reasons. The rail-welding operation for the entire bridge was completed during the summer of 1949.

The actual reconstruction of the deck was started in January, 1950. The first operation was to remove the steel guardrails and place them in sections on the sidewalks at either side of the tracks. The old galvanized steel decking was then loosened by removing the holddown screw spikes. The running rail, with the tie plates attached, was then snaked aside to permit the use of a machine to adz the bearing areas of the ties, and also to install the drain troughs between the ties. The ties were adzed to a depth of approximately ½ in. to remove all damaged timber and level the bearing surfaces. All top surfaces of the timber ties were coated with an asphalt mastic and ⅜-in. tie pads were then positioned on each tie-plate bearing surface. The rail, as welded into continuous lengths, was then replaced, using new screw spikes, and the guardrails were placed. Once both running rails had been prepared in this manner, the track for that particular section was ready for placement of the aluminum decking.

Installing the Decking

As soon as the old decking was removed and the track prepared in a sizeable area, Plate I (see drawing) was installed between the two inside guardrails. This was done to restore, as soon as possible, a certain amount of fire protection while the other work was in progress. The supports, or chairs, for Plates G and H were then secured to the ties by 1½-in. wood screws. Being 8 ft. 2 in. in length, one plate, G or H, covers six ties at the 16-in. center-to-center spacing. For stability, four chairs of .081 in. thickness (12 B.&S. gage) were used under



The 8-ft. 2-in. aluminum plates are easily handled by one man

each full-length G and H plate. Plate G is .081 in. thick, while all the other plates in the deck are .064 in. thick (14 B.&S. gage).

The arms of the two middle chairs slide into clips located on the undersides of both Plates G and H, the ends of which are then fastened to the end chairs with aluminum cap bolts. This combination of plates and supports was born of necessity, since both Plates G and H must be removed with ease before the ties, tie plates, bolts and spikes can be inspected. Plate F was then fastened directly to the ties beside the timber guardrails; and finally Plate E, which covers the timber guardrails, was fastened into position to complete the decking.

Placement of the decking has been arranged to minimize interference with the movement of traffic over the bridge. During the 8-hour workday there is always one live track, and when the decking crew leaves at night both tracks are operated for the next 16 hours without any interference.

Field Fabrication Minimized

To ease the handling and assembling of the large amounts of aluminum sheet required for the decking, all the sheet sections were fabricated in 8-ft. 2-in. lengths that provide 8 ft. of deck coverage, with a 2-in. overlap. Field sawing is required to shorten the 8-ft. 2-in. pieces in some cases where there is a variance in the normal distance of 120 ft. between the troughs and the expansion joints. In addition, the long gradual curves on the approaches have made it impossible to use the full 8-ft. 2-in. pieces at all times.

Two oblong holes were punched 2 in. from each end of Plates G and H—the removable sheets—for chair attachment and to allow for some tolerance and expansion. Two clips were riveted to the undersides of both plates to permit the top arm of the fastening chairs to slip in and out instead of anchoring the plate permanently with bolts. Sawing, hole punching, and riveting are the only three fabricating operations that are done on location. Before shipment from the fabricating shop to the bridge all sheets are preformed as shown in the various photographs.

The entire operation of installing the decking was designed to avoid the necessity for special craftsmen. The regular track and bridge crews of the New Orleans Public Belt have been used at all times. All tools used are pneumatic, permitting them to be moved over a wide area when used with a track-mounted air compressor. All deck-installation operations are done by using pneumatic drills, screw drivers, and bolt tighteners.

Progress of the Work

In order to prove the suitability of the design, the production methods, and the proposed installation procedures, a 400-ft. pilot test section of the new deck was placed on the bridge during October, 1949. Full-scale operations were begun in late February, 1950, and will be continued as long as weather permits. Based on the present rate of work, it is predicted that the entire aluminum decking will be in place by the early part of 1951.

More than half a million pounds of aluminum, in the form of decking, drain troughs, supports, and assembly items, will be required.

The Huey Long bridge is owned and operated by the New Orleans Public Belt Railroad, a publicly owned and operated switching line that serves the port and industries of New Orleans. This article is based on material and information furnished by E. J. Garland, general manager, and E. L. Mire, chief engineer, of the New Orleans Public Belt, in conjunction with representatives of the various user lines, the Aluminum Company of America, and Messrs. Frank M. Masters and C. W. Hanson of Modjeski & Masters.

The Trackmobile, which weighs only 6,000 lb. but has plenty of power to pull fully loaded box cars—The driver's seat is located to give full vision in either direction on one side of the track

Trackmobile coupled to a freight car—A self-centered hydraulic jack permits raising the coupling and shifting part of the car's weight to the Trackmobile

The Trackmobile with rubber-tired wheels lowered hydraulically for ground operation

Whiting Trackmobile Speeds Car Handling

Versatility in spotting and switching railway cars is promised by means of the Trackmobile now being introduced by the Whiting Corporation, Harvey, Ill. This small and compact, gasoline-engine-driven machine makes use of hydraulic jacking power for two features which Whiting engineers believe can revolutionize yard and intra-plant methods of railway car handling.

The Trackmobile is designed for operation either on railway track or on the ground and the change from one to the other is made in 30 seconds by means of hydraulic jacking power which is also employed to develop additional adhesion for moving railway cars weighing many times more than the tractor's 6,000 lb. An automotive-type clasp brake works on the main drive shaft, thus serving both the rail and road wheels.

The Trackmobile may be coupled to any standard railway car and the hydraulic jack used to raise a special coupler, transferring a portion of the car's weight to the tractor and thus enabling it to develop a maximum drawbar pull of 7,350 lb. without wheel slippage. Power is supplied from a 60-hp. gasoline engine through a mechanical transmission and roller chain drive.

The Trackmobile uses four A.A.R. standard flanged steel wheels for track travel. The four rubber-tired wheels for ground travel are hydraulically retracted when the machine is positioned for track operation. One operator easily controls transfer from one set of wheels to the other. Maximum ground speed is 25 m.p.h.; track speed varies with the load.

Unlike the conventional industrial switcher which is limited to track operation, the Trackmobile can handle a hauling, switching or spotting job and then move from track to ground and travel across the yard for another job. Possible uses for the Trackmobile are in industrial plants, railroad car shops, quarries, coal yards, docks, mines, military and naval bases. The machine will be on the market early in 1951 and will be sold through distributors in all principal cities.

Nine Months' Purchases Are $2,150,664,000

Includes $914,814,000 for locomotive, freight and passenger car orders

Equipment buying by domestic railroads continued its record-breaking pace through September, bringing the total cost of locomotives and cars ordered during the first three quarters of 1950 up to $914,814,000, compared with $108,880,000 in the comparable period of 1949. September equipment purchases alone called for an outlay of $202,780,000 for 25,611 freight-train cars, 473 diesel-electric locomotive units and 9 passenger cars. In August $167,525,000 was allocated for purchases of 24,280 freight-train cars, 296 diesel units and 12 electric locomotives and 3 passenger cars.

These orders helped swell total purchases by railroads from January 1 through September to $2,150,664,000, an increase of $709,356,000 over the like 1949 period. The dollar value of purchases during this year's first three quarters, in all categories except equipment, continued to lag behind the 1949 figures.

1950 RAILWAY PURCHASES*

	September (000)	Nine Months Totals 1950 (000)	Nine Months Totals 1949 (000)
Equipment**	$202,780	$ 914,814	$ 108,880
Rail	8,076	74,537	86,715
Crossties	4,124	42,558	68,021
Other Material	82,777	685,771	735,397
Total from Manufacturers	$297,757	$1,717,680	$ 999,013
Fuel	50,287	432,984	442,295
Grand Total	$348,044	$2,150,664	$1,441,308

*Subject to revision
**Amount placed on order

SEPTEMBER* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
1944	$89,296	+ 6
1945	85,813	+ 11
1946	95,861	— 1
1947	96,102	— 1
1948	115,892	— 18
1949	73,661	+ 29
1950	94,977	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan.	$74,314	+ 29
Feb.	72,304	+ 31
Mar.	87,984	+ 7
Apr.	86,610	+ 10
May	98,966	— 4
June	96,715	— 2
July	92,376	+ 3
Aug.	98,620	— 4
Sept.	94,977	

Year	Nine Months Totals '50 And Other Years (000) Amt.	% Change
1944	$771,887	+ 4
1945	743,823	+ 8
1946	729,892	+ 10
1947	912,022	— 12
1948	991,910	— 19
1949	890,133	— 10
1950	802,866	

SEPTEMBER* PURCHASES OF RAIL

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
1944	$5,647	+ 43
1945	7,691	+ 5
1946	7,220	+ 12
1947	7,121	+ 13
1948	9,383	— 14
1949	8,136	— 1
1950	8,076	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan.	$8,806	— 8
Feb.	6,444	+ 25
Mar.	7,669	+ 5
Apr.	7,796	+ 4
May	10,060	— 20
June	7,627	+ 6
July	10,014	— 19
Aug.	8,045	.....
Sept.	8,076	

Year	Nine Months Totals '50 And Other Years (000) Amt.	% Change
1944	$56,860	+ 31
1945	56,316	+ 32
1946	43,720	+ 70
1947	64,429	+ 16
1948	70,787	+ 5
1949	86,715	— 14
1950	74,537	

SEPTEMBER* PURCHASES OF CROSSTIES

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
1944	$7,866	— 48
1945	7,081	— 42
1946	7,608	— 46
1947	7,313	— 44
1948	9,093	— 55
1949	7,296	— 43
1950	4,124	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan.	$3,823	+ 8
Feb.	3,985	+ 3
Mar.	4,984	— 17
Apr.	5,286	— 22
May	5,491	— 25
June	5,654	— 27
July	4,467	— 8
Aug.	4,744	— 13
Sept.	4,124	

Year	Nine Months Totals '50 And Other Years (000) Amt.	% Change
1944	$65,557	— 35
1945	54,322	— 22
1946	66,068	— 36
1947	73,705	— 42
1948	61,080	— 30
1949	68,021	— 37
1950	42,558	

*Subject to revision

SEPTEMBER* PURCHASES OF OTHER MATERIAL

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
1944	$75,783	+ 9
1945	71,041	+ 17
1946	81,033	+ 2
1947	81,668	+ 1
1948	97,416	— 15
1949	58,229	+ 42
1950	82,777	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan.	$61,685	+ 34
Feb.	61,875	+ 34
Mar.	75,331	+ 10
Apr.	73,528	+ 13
May	83,415	— 1
June	83,434	— 1
July	77,895	+ 6
Aug.	85,831	— 4
Sept.	82,777	

Year	Nine Months Totals '50 And Other Years (000) Amt.	% Change
1944	$649,470	+ 6
1945	633,185	+ 8
1946	620,104	+ 10
1947	773,888	— 11
1948	860,043	— 20
1949	735,397	— 7
1950	685,771	

SEPTEMBER* PURCHASES OF FUEL

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
1944	$43,977	+ 14
1945	44,325	+ 13
1946	51,148	— 2
1947	56,172	— 10
1948	69,743	— 28
1949	34,848	+ 44
1950	50,287	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan.	$46,700	+ 8
Feb.	34,823	+ 44
Mar.	56,725	— 11
Apr.	51,288	— 2
May	48,272	+ 4
June	48,856	+ 3
July	42,975	+ 17
Aug	53,058	— 5
Sept.	50,287	

Year	Nine Months Totals '50 And Other Years (000) Amt.	% Change
1944	$445,374	— 3
1945	418,943	+ 3
1946	405,916	+ 7
1947	492,017	— 12
1948	626,317	— 31
1949	442,295	— 2
1950	432,984	

SEPTEMBER* TOTAL PURCHASES (Excl. Equip.)

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
1944	$133,273	+ 9
1945	130,138	+ 12
1946	147,009	— 1
1947	152,274	— 5
1948	185,635	— 22
1949	108,509	+ 34
1950	145,264	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan.	$121,014	+ 20
Feb.	107,127	+ 36
Mar.	144,709	.....
Apr.	137,898	+ 5
May	147,238	— 1
June	145,571	.....
July	135,351	+ 7
Aug.	151,678	— 4
Sept.	145,264	

Year	Nine Months Totals '50 And Other Years (000) Amt.	% Change
1944	$1,217,261	+ 2
1945	1,162,766	+ 6
1946	1,135,808	+ 9
1947	1,404,039	— 12
1948	1,618,227	— 24
1949	1,332,428	— 7
1950	1,235,850	

SEPTEMBER* INVENTORIES OF RAIL

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
Sept. 1, 1944	$22,324	+ 68
1945	25,611	+ 46
1946	25,192	+ 49
1947	29,766	+ 26
1948	32,212	+ 16
1949	39,057	— 4
1950	37,452	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan. 1	$31,926	+ 17
Feb.	36,893	+ 2
Mar.	40,594	— 8
Apr.	41,482	— 10
May	38,941	— 4
June	38,618	— 3
July	37,542	.....
Aug.	38,258	— 2
Sept.	37,452	

SEPTEMBER* INVENTORIES OF CROSSTIES

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
Sept. 1, 1944	$71,306	+ 18
1945	62,070	+ 35
1946	74,454	+ 13
1947	83,771	.....
1948	78,309	+ 7
1949	92,126	— 9
1950	83,869	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan. 1	$101,393	— 17
Feb.	102,491	— 18
Mar.	105,934	— 21
Apr.	106,269	— 21
May	99,118	— 15
June	95,463	— 12
July	90,779	— 8
Aug.	87,711	— 4
Sept.	83,869	

SEPTEMBER* INVENTORIES OF OTHER MATERIAL

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
Sept. 1, 1944	$427,277	+ 21
1945	448,110	+ 15
1946	464,973	+ 11
1947	555,498	— 7
1948	611,861	— 16
1949	595,665	— 14
1950	515,005	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan. 1	$528,400	— 3
Feb.	526,201	— 2
Mar.	525,771	— 2
Apr.	521,506	— 1
May	520,845	— 1
June	518,654	— 1
July	520,334	— 1
Aug.	519,815	— 1
Sept.	515,005	

SEPTEMBER* INVENTORIES OF SCRAP

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
Sept. 1, 1944	$10,292	+ 32
1945	13,979	— 3
1946	11,546	+ 17
1947	9,978	+ 36
1948	15,927	— 15
1949	16,241	— 17
1950	13,538	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan. 1	$14,874	— 9
Feb.	14,840	— 9
Mar.	12,922	+ 5
Apr.	14,147	— 4
May	14,269	— 5
June	14,304	— 5
July	13,045	+ 4
Aug.	13,669	— 1
Sept.	13,538	

SEPTEMBER* INVENTORIES OF FUEL

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
Sept. 1, 1944	$67,538	— 24
1945	55,333	— 7
1946	51,944	— 1
1947	63,026	— 18
1948	91,850	— 44
1949	71,341	— 38
1950	51,429	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan. 1	$48,928	+ 5
Feb.	45,969	+ 12
Mar.	39,369	+ 31
Apr.	42,492	+ 21
May	43,695	+ 18
June	45,298	+ 14
July	49,112	+ 5
Aug.	46,329	+ 11
Sept.	51,429	

SEPTEMBER* TOTAL INVENTORIES†

Year	Sept. '50 Compared to Other Septs. (000) Amt.	% Change
Sept. 1, 1944	$598,737	+ 17
1945	605,103	+ 16
1946	628,109	+ 12
1947	742,039	— 5
1948	830,159	— 16
1949	814,430	— 14
1950	701,293	

Month	Sept. '50 Compared to Other Months '50 (000) Amt.	% Change
Jan. 1	$725,521	— 3
Feb.	726,394	— 3
Mar.	724,590	— 3
Apr.	725,896	— 3
May	716,868	— 2
June	712,337	— 2
July	710,812	— 1
Aug.	705,782	— 1
Sept.	701,293	

*Subject to revision

†All total inventory figures taken from I.C.C. statement M-125 for the month indicated

GENERAL NEWS

Knudson Gives Views On "Barrier Problem"

Highway officials also hear Fleming rap "overloading"

James K. Knudson, administrator of the Defense Transport Administration, this week indicated that he would do something about what he called the "interstate trade barrier problem" as it relates to trucking, in the event of "another large-scale emergency." Mr. Knudson's statement was made in Miami, Fla., on December 4, at the annual convention of the American Association of State Highway Officials, where Major General Philip B. Fleming, undersecretary of commerce for transportation, also made a speech in which he asserted that "there would appear to be no justification for widespread overloading of trucks, now or later."

Favors "Full Reciprocity"

It is Mr. Knudson's view that the "barrier problem" could best be dealt with through adoption by the states of uniform size and weight regulations for trucks, and establishment of "full reciprocity." This, he said, would be "preferable" to enactment of federal legislation fixing size and weight limits for vehicles moving in interstate commerce.

"It is important," the D.T.A. administrator also said, "that steps be taken promptly to deal with these problems of interstate trade barriers. If the states do not in this emergency period cooperate effectively, in objective reappraisal looking forward to elimination of all unjustifiable barriers, their failure to do so will be an invitation to elements of the federal government to take the lead in bringing about uniform standards."

The uniform code recommended by the association before which he was speaking would provide limitations "in full compliance with the physical capabilities and safety requirements of our highways," Mr. Knudson suggested. He also pointed out that the code's recommendations "permit gross loads ranging as high as 72,000 lb. on a truck and full-trailer combination"; adding that:

"A better understanding of what a more rational approach to size and weight regulation means to our economy may be found through comparison of the operations of motor carriers in the western states with those in other areas of the country. The 11 western states have size and weight laws that are in basic conformance with those limits prescribed by the code of the A.A.S.H.O.

"Reports submitted to the Interstate Commerce Commission by Class I common carriers of general freight show that carriers in the western states operate with an average pay load of 11.5 tons. This compares with an average of 9.3 tons for carriers in the remaining areas of the country . . . This is a significant difference when we think in terms of equipment and manpower utilized in performing transportation services.

"If the other areas of the country were able to utilize the larger equipment with the recommended weight distribution they would effect great savings in terms of vehicles and personnel. If these carriers operated with the same average load as the carriers in the western states, they would be able to perform their same service with 20 per cent fewer vehicles. Conversely, they would be able to carry more than 20 per cent additional tonnage without adding to their fleet. The savings in manpower would be equally important."

Earlier in his address, Mr. Knudson had asserted that operations of the motor carrier industry "provided what might well have been the margin between failure and success" in World War II. He went on to liken the present set-up of state laws fixing size and weight limits to past situations wherein "legislative burdens, invoked sometimes at the instigation of one type of carrier, have impeded the development, for a time, of competing modes of transport."

General Fleming's assertion that there appeared to be "no justification" for overloading of trucks came in a part of his address which referred to Department of Defense's recently announced plan to prevent use by truckers of the "national-defense" excuse for indiscriminate overloading. As noted in the *Railway Age* of December 2, page 81, the Defense Department proposed that each state governor designate one official who will be authorized to grant waivers or permits for loading beyond prescribed limits, when requested by authorized military representatives to do so. The governors were assured that "under no circumstances will carriers be authorized to represent the military services in seeking such permits."

Would Prevent Confusion

"In my opinion," General Fleming said, "such an approach will go far toward preventing any repetition of the confusion and uncertainty which size and weight limitations provoked during World War II. And with a better realization of the fundamental role that our highways play, we should be better prepared to protect them."

Referring to the tests of concrete pavement under various axle loads, which are now being conducted near La Plata, Md., General Fleming said his own observations and interim reports indicate to him that "excessive loading does not constitute a real threat to our highways in general and to the vitally important interstate system in particular." (See *Railway Age* of October 14, page 37.) Noting the "mounting" volume of highway traffic, and the "urgent need to conserve and improve" the highways, General Fleming warned that "we simply cannot afford the luxury of damaging axle weights which serve the aims of a very small minority of commercial operators."

He went on to say that there "may be some elements in the trucking industry" who are now "inclined to look askance" at the Maryland tests. "I trust," he added, "their counsel will not prevail, for in my opinion, the industry would be very ill-advised to take such a stand. Rather let me urge them to be as objective as the Highway Research Board itself. In that event, the La Plata test could well serve as a powerful lever to be used in behalf of the nation's highways."

Before getting into this highway discussion, General Fleming had explained his role as undersecretary of commerce for transportation. The explanation included comment on Secretary of Commerce Sawyer's November 29 order which expanded the role. (See *Railway Age* of December 2, page 83.)

"The national transportation policy, when it is evolved out of the projects which President Truman and Secretary Sawyer have thus set in motion, cannot be a static policy," the general said. "These two top officials are aware of the changing pattern of transportation today and of the increasing important role of highway transportation in the overall picture."

Net Income for 1950 Reaches $575 Million

Net railway operating income is $814.6 million

Class I railroads in the first ten months of 1950 had an estimated net income, after interest and rentals, of $575,000,000, compared with $302,000,000 in the corresponding period of 1949, according to the Bureau of Railway Economics of the Association of American Railroads.

The ten-months' net railway operat-

ing income, before interest and rentals, was $814,671,802, compared with $542,809,666.

Estimated results for October showed a net income of $108,000,000, compared with $22,000,000 for October, 1949, when traffic was sharply reduced by strikes in the coal and steel industries. Net railway operating income for the 1950 month was $134,629,278, while in October, 1949, it was $46,667,317.

In the 12 months ended with October, the rate of return averaged 3.99 per cent, compared with 2.93 per cent for the 12 months ended with October, 1949.

Gross in the ten months of 1950 amounted to $7,683,079,585, compared with $7,157,346,135 in the same period of 1949, an increase of 7.3 per cent. Operating expenses amounted to $5,795,241,147, compared with $5,775,134,157, an increase of 0.3 per cent.

Eighteen Class I roads failed to earn interest and rentals in the first ten months of 1950, of which nine were in the Eastern district, two in the Southern region, and seven in the Western district.

Class I roads in the Eastern district in October had an estimated net income of $35,000,000 compared with a deficit of $11,000,000 in October, 1949. In the ten months, their estimated net income was $205,000,000 compared with $77,000,000 in the same period of 1949.

Their net railway operating income in October amounted to $46,671,239 compared with $2,625,911 in October, 1949. Those same roads in the ten months had a net railway operating income of $326,690,614 compared with $210,941,736 in the same period of 1949.

Gross in the Eastern district in the ten months totaled $3,409,928,829, an increase of 7.3 per cent compared with the same period of 1949. Operating expenses totaled $2,663,016,961, an increase of 1.2 per cent.

Class I roads in the Southern region in October had an estimated net income of $15,000,000 compared with $4,000,000 in October, 1949. In the ten months, their estimated net income was $88,000,000 compared with $45,000,000 in the same period of 1949.

Those same roads in October had a net railway operating income amounting to $18,252,255 compared with $7,819,432 in October, 1949. Their net railway operating income in the ten months amounted to $122,236,280 compared with $82,068,341 in the same period of 1949.

Gross in the Southern region in the ten months totaled $1,062,019,662, an increase of 8.1 per cent compared with the same period of 1949, while operating expenses totaled $794,068,272, an increase of 0.3 per cent.

Class I roads in the Western district in October had an estimated net income of $58,000,000 compared with $29,000,000 in October, 1949. Their estimated net income in the ten months was $282,000,000 compared with $180,000,000 in the same period of 1949.

Their net railway operating income in October amounted to $69,705,784 compared with $36,221,974 in October, 1949. Those same roads in the ten months had a net railway operating income of $365,744,908 compared with $249,799,589 in the same period of 1949.

Gross in the Western district in the ten months totaled $3,211,131,094, an increase of 7.1 per cent compared with the same period of 1949, while operating expenses totaled $2,338,155,914, a decrease of 0.6 per cent.

CLASS I RAILROADS — UNITED STATES

	Month of October 1950	1949
Total operating revenues	$ 925 383,234	$ 649,246,400
Total operating expenses	635,020,694	521,127,075
Operating ratio — per cent	68.62	80.27
Taxes	139,032,238	65,599,160
Net railway operating income (Earnings before charges)	134,629,278	46,667,317
Net income, after charges (estimated)	108,000,000	22,000,000
	Ten Months Ended October	
Total operating revenues	7,683,079,585	7,157,346,135
Total operating expenses	5,795,241,147	5,775,134,157
Operating ratio — per cent	75.43	80.69
Taxes	922,575,384	699,623,190
Net railway operating income (Earnings before charges)	814,671,802	542,809,666
Net income, after charges (estimated)	575,000,000	302,000,000

AN INTENSIVE DISCUSSION of car-temperature control, by railroad mechanical officers of Marshall Plan countries, took place during their recent visit to the Chicago plant of the Vapor Heating Corporation. Here E. Johnson, a Vapor engineer (extreme left) explains operation of the "anticipating" thermostat held by N. Sorgcard of the Danish State Railways (extreme right), as N. Gabrielsson and A. I. Janson of the Swedish State Railways and O. Flores of the Norwegian State Railways (momentarily examining a thermostatic control unit on the bench), familiarize themselves with the device

Railroads Pledged to Fullest National Service

Six leaders of the railroad industry joined on December 7 in pledging railroads to fullest national service in the current emergency despite restrictions laid upon carriers by outdated regulatory and subsidy policies. Their views were expressed in individual messages to the 78th annual dinner of the New York Railroad Club, attended by about 2,400 railway officers and railway equipment manufacturers at the Commodore Hotel.

While the general tenor of the messages was optimistic, there was a consistent undertone of concern as to how much more the railroads could possibly add to the expansion program already involving more than $4,000,000,000 of improvements financed since 1945 in a period of meager earnings. Industry leaders who addressed the dinner were: William T. Faricy, president, Association of American Railroads; G. Metzman, president, New York Central System; W. S. Franklin, president, Pennsylvania; R. B. White, president, Baltimore & Ohio; W. J. Tuohy, president, Chesapeake & Ohio; and Paul W. Johnston, president, Erie.

Mr. Faricy emphasized that railroad "readiness" to do the job required of this irreplaceable transportation agency, with the greatest economy, requires constant heavy expenditures for more efficient equipment. He described the "four factors" of railroad efficiency as earnings, investment, capacity and economy. "Without earnings, present or prospective, invest-

ment lags," he said. "Without investment in improved plant and facilities, capacity fails to keep up with demand. Without improved plant, efficiency sinks and operating costs rise. Conversely, good earnings mean more investment in better plant, which means greater capacity and reduced costs."

Warns of E.P.T.

Mr. Metzman pointed out that new demands on railroads promise prospective earnings that will help to meet this situation, but he warned of possible results of imposition of an excess profits tax on those prospective earnings. The N. Y. C. president said the railroad industry, which carried more than 90 per cent of the war freight, more than 97 per cent of organized troop movements, and performed more than 70 per cent of all transportation services during World War II, had average earnings of only 3.5 per cent on its net investment over the past 30 years. "It would be the supreme irony if this nation," he went on, "in undertaking a large-scale defense program, simultaneously adopted an excess profits tax which would deprive the railroads of the very means they must have to carry out their own indispensable part of this same program. I have every hope that Congress, in its wisdom, never will permit this to happen. With our rates regulated by the government, it is obvious that we have no opportunity to make excess profits."

Mr. Franklin noted that the Pennsylvania alone has invested more than $500,000,000 in its postwar equipment program, "the largest in our history." He said heavy expenditures by the industry "show conclusively that the railroads are alert to the nation's needs and that railroad management is making an all-out effort to serve the public. Events in recent months have re-emphasized that there is no substitute for railroads. We have had just enough of a car shortage to bring a realization of the importance of adequate railroad transportation. There is only one prescription—more cars—which will fully meet the situation, and it is being met."

RRs Pay Huge Taxes

Mr. White observed that while railroads "pay enormous taxes, support large payrolls, pay rents, own property, purchase light, heat, water, gas and other services, just as any other business does," the public has taken them too much for granted, often "with the same indifference that it regards a river." He noted, however, that within the past year a growing number of persons have recognized "that their interests coincide with the interest of the railroads with respect to big trucks on the public highways," with a consequent "veritable outpouring of public protest against the big trucks." "People have begun to realize," Mr. White went on, "that they themselves receive little benefit from the subsidies their taxes provide to trucks and certain other forms of transportation. The reduced costs that result from the subsidies benefit only a few special interests rather than the taxpayers and consumers at large."

Mr. Tuohy emphasized that changes must be made in the subsidy policies noted by Mr. White, because railroads are a competitive business regulated under the apparent theory that they constitute a monopoly. This has resulted, he said, in out-dated rate procedures that have depressed every activity of the railroads. "The railroads ask nothing in the way of a subsidy or gratuity of any kind," Mr. Tuohy stated, "but they insist on the freedom of operating their properties as good business institutions. No other corrective step could be so helpful to the preservation and prosperity of the railroads as the devising of modern rate-making machinery. Well may it be pointed out that 50 years ago the railroads had a virtual monopoly in transportation that required rigid control. But the railroads certainly no longer have anything even approaching a monopoly, and in fact are now fighting for their existence against strong competitors who are able to adjust their rates quickly to meet competitive conditions. The industry is in critical need of a new procedure now to permit greater freedom in pricing its product to meet pressing competition."

President Johnston, of the Erie, added that the defense program could be seriously retarded by failure of regulatory authorities to correct conditions noted by the other railroad presidents. "No one will deny," he said, "that our national economy requires the services of all forms of transportation. Yet the competitive inequalities present in the transportation field today are contrary to the best interests of the national welfare. It would be foolhardy for our government to fail to recognize the dangers to our national security by continuing to pursue a policy that favors one form of transportation by promotion and subsidy to the detriment of another saddled with restrictions and taxation."

The official messages were summarized for the gathering by Perry M. Shoemaker, president of the club and vice-president of the Delaware, Lackawanna and Western. The dinner was brought to a close with a ceremony honoring American service men who fell at Pearl Harbor.

R.E.A., Clerks' Union Urge Higher Parcel Post Rates

The Post Office Department's case for higher parcel post rates was presented this week at hearings before Interstate Commerce Commissioner Mitchell and Examiner C. A. Rice.

The Railway Express Agency and George M. Harrison, president of the Brotherhood of Railway Clerks, made presentations supporting the post office. They contended generally that increased rates on fourth-class mail (parcel post) would swing more business to the R.E.A.

Postmaster General Donaldson, complying with a "directive" from Congress, asked the I.C.C. in a letter last October

Don't Forget . . .

THE TRUCK, AIRLINE, AND BUS COMPANIES HAVE GOOD EQUIPMENT AND LOYAL, SKILLED EMPLOYEES, TOO. AND THEY HAVE MANY TRANSPORTATION ADVANTAGES ON THEIR SIDE, TOO.

IT'S JUST THAT WE'RE CERTAIN OUR ADVANTAGES ARE BEST . . .

AND THAT CUSTOMERS WILL FIND OUR ADVANTAGES BEST.

BUT WE CAN'T MOPE 'N' STEW AROUND ABOUT WHAT WE HAVEN'T GOT . . .

OR ABOUT UNFAIR ADVANTAGES OF OUR COMPETITORS.

WE MUST PADDLE OUR OWN CANOE

. . . AND WITH IMPACT!

"MORE BUSINESS MEANS MORE JOB SECURITY," the Norfolk & Western tells its employees in "Impact!"—a recently issued 4 in. by 6 in. 56-page booklet. Printed in black and red, the booklet uses short, easy-to-read text and simple line illustrations, as shown here, to get across the message that "Drive, foresight, initiative . . . will sell today's N. & W. service to the millions of shipping and traveling Americans who NEED our services"

GREAT NORTHERN EXECUTIVES PLAYED HOST to school teachers of the Twin Cities area as a part of "Business-Education Day" observed throughout Minneapolis, Minn., and St. Paul on October 25, by railroads serving the two cities. With schools dismissed for the day, teachers took a "short course in railroading" by touring railroad offices, shops, terminals and other facilities. The day was highlighted by a luncheon served in a dining car with a G.N. host at each table. Visible in the picture, each facing the camera, from left to right, are J. A. Tauer, comptroller; G. F. Hardy, general freight traffic manager, and V. P. Turnburke, vice-president, executive department

to consent to establishment of the increased rates. Mr. Donaldson estimated the new rates would yield more than $110 million a year, and would raise annual revenues from fourth-class mail high enough to pay the allocated cost of such service. (See *Railway Age* of October 21, page 41.)

The commission docketed the case as No. 30690, and at the opening hearings only the department and those favoring the increased rates appeared. Commissioner Mitchell has set January 3, 1951, as the date on which the hearings will resume. Those opposing the increases, including several associations and shipper groups, will offer evidence at that time.

The National Industrial Traffic League, one of the parties in the case, has taken the position that it is not opposed to parcel post increases "which may be shown to be necessary." The league has urged the commission to conduct full hearings in this case, "as customary in carrier rate proceedings."

Witnesses for the department included Nelson B. Wentzel, deputy assistant postmaster general, and Edmund J. Walsh of the department's cost-ascertainment section. Mr. Wentzel gave a general summary of how the proposed increases would apply.

Discusses Effects

Commenting on some of the likely effects of the higher rates, Mr. Wentzel said it is reasonable to assume that there would be a loss in volume in shipments of books weighing more than 10 pounds. Questioned by protestants as to whether such a loss would not be adverse to the department's need for more revenue, Mr. Wentzel stated that any loss would be more than made up by the new surcharges that the postmaster general would have authority to establish under the revised rates. As to heavy shipments of books, he indicated they "belong" in freight rather than in fourth-class mail.

1949 Income and Outlay

Mr. Walsh presented statistical data on postal revenues and expenditures for 1949. In discussing expenditures for that year Mr. Walsh noted that it had been necessary to add $40,681,612 to rail transportation costs. He said this represented a taking into account of recent settlements in the mail pay case (No. 9200). He added that approximately $25,800,000 of this additional cost for 1949 was assignable to parcel post.

The R.E.A. witnesses who testified in support of the higher rates were Alfred L. Hammell, president of the agency; K. N. Merritt, vice-president, traffic; and Paul Gross, Jr., assistant to vice-president, accounting.

Mr. Hammell testified that low parcel post rates have greatly injured R.E.A. business since the end of World War II. The agency's interest in this proceeding, Mr. Hammell said, is in the establishment of parcel post rates that will yield revenue adequate to meet the cost of the service. He said that private enterprise that pays its own way cannot compete with this type of government competition and survive.

"If parcel post rates are established at a level which will cover the cost of the service, Railway Express Agency will again be placed in a position to compete effectively for the business that is available and will be enabled to restore jobs to thousands of express employees who had hoped to make express their life's work," Mr. Hammell said. He said that 32,542 expressmen have been thrown out of work since 1946 as a result of the continuing decline in express business.

Mr. Merritt said that because of favorable parcel post rates the post office had a 58.5 per cent increase in the number of parcels weighing 36 to 40 pounds in the fiscal year 1949. Meanwhile, Mr. Hammell had compared 1946 with 1949 and found that l.c.l. express shipments had declined 100,080,947, while parcel post pieces gained 227,693,766.

Mr. Gross in his statement brought in certain "unseen" costs of conducting postal operations. He said the department in computing expenses does not allow for building rents, contributions toward employee retirement funds, accounting and auditing by the General Accounting Office, and other factors, all of which would add another $42,036,810 to the department's 1949 expenses.

Further support for the higher rates came from Mr. Harrison of the clerks' union. He said he genuinely hopes the commission will approve the post office's petition and added that if anything he felt the post office was not asking for enough. Among the reasons for his appearance Mr. Harrison stated that the clerks' union represents about 90 per cent of all R.E.A. employees, and that he is opposed to seeing the post office department in the general freight transportation business.

"We think it is economically unsound and socially undesirable for our government to engage in general transportation in competition with private enterprise when it charges less than what it costs to furnish those transportation services," he said. He cited the decline in express agency business since the war as something that has "seriously impaired" the ability of R.E.A. to give adequate service to the nation.

Traffic Policies Announced By Department of Defense

Uniform policies "for coordinating the traffic management activities of the departments of the Army, Navy, and Air Force" were announced last week by Secretary of Defense Marshall. These formal policies became effective as of November 15, superseding policies of the same general character that had been in effect since September 18, the announcement pointed out.

"It is anticipated," it added, "that a period of approximately 60 days will be required for the military departments to make necessary modifications to existing regulations and publish and distribute the changes to all field offices." The new policies are the joint work of the three military departments

(Continued on page 49)

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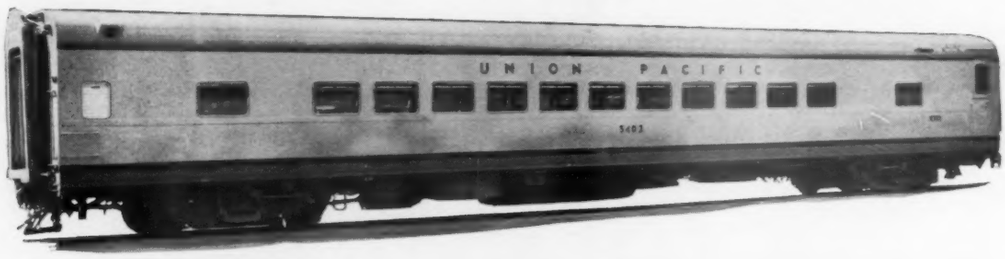

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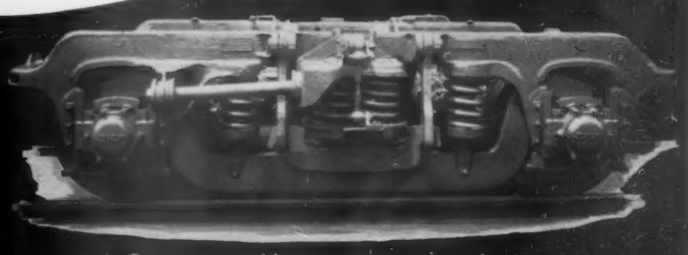

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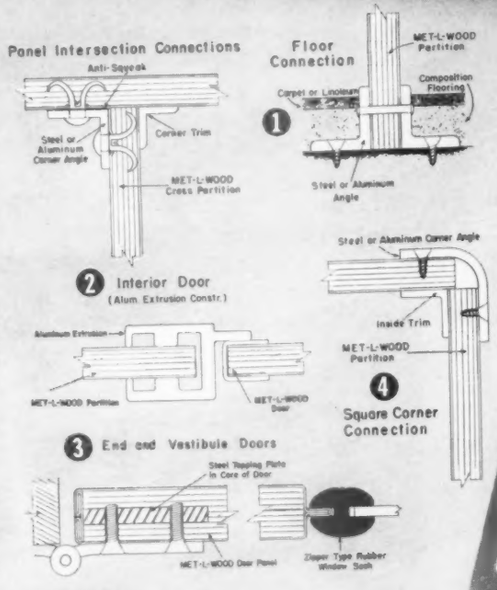

1 Panel intersections with Met-L-Wood can be made invisible from outside with the use of split rivets. Floor connections may be made in a variety of ways, one of which is shown here, using through-rivets and metal screws.

2 Interior doors of Met-L-Wood can be fitted with aluminum extrusion door stops; or the Met-L-Wood partition formed so that the door stop is an integral part of the panel.

3 Steel tapping plate inserts can be put in Met-L-Wood doors at proper places for solidly anchoring hinges and door-opening devices. Note simplicity of using zipper-type window sash with pre-formed Met-L-Wood window openings.

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(*Continued from page 46*)
and the Defense Department's Military Traffic Service, which is headed by E. Grosvenor Plowman.

Attached to the statement of the policies is a reproduction of the Interstate Commerce Act's declaration of national transportation policy, which was quoted "for guidance" in connection with the M.T.S. policies.

First of the latter are the "negotiation policies." These provide that military departments negotiating section 22 rates with the carriers must obtain authority for such negotiations from M.T.S. if movements of 1,000 tons or more are involved. Results of the negotiations must be reported to M.T.S. "for review and decision as to publicity outside the Department of Defense." Rates involving movements of less than 1,000 tons may be negotiated without prior clearance, but here, too, the results must be reported to M.T.S.

The negotiation policies also stipulate that "no promise of tonnage by any military department may be made to carriers or owners of commercial transportation equipment as an inducement to acquire additional equipment or new or additional operational authority." As to rate conferences with carriers, it is provided that representatives of the military departments may attend—provided the conferences are authorized under the Bulwinkle-Reed Act (now section 5a of the I.C. act). The military representatives are forbidden to participate in rate conferences in any capacity other than that of user of the carrier services involved.

M.T.S. Approval Required

It is also provided that no representative of any military department shall initiate or participate in proceedings before transport regulatory bodies without prior approval of M.T.S. There is an exception to permit carrying out of the Defense Department's policy with respect to applications of carriers for new or increased operating authority.

That policy provides generally that the department or its constituent departments or agencies shall participate in proceedings involving applications for certificates of public convenience and necessity only when the regulatory body requests information, or when the service involved is necessary and not otherwise available to the department. If two or more carriers are proposing the service deemed necessary, the department "will not indicate a preference for any particular type of carrier."

Returning to the statement of traffic policies, there is embodied in Section II the "routing policies." There it is provided that the "least costly" means of transportation shall be selected, "having in mind safety, expedition, equipment supply, procurement regulations, military necessity, and the national transportation policy." Consideration must also be given to the "possibility" of negotiating section 22 rates. After the mode of transportation is determined, the "usual customary routes should be selected . . . with care exercised to avoid undue waste of transportation and to bring about proper use of commercial equipment. . . ."

"Within the foregoing principles," it is further provided, "routing should cause to the maximum extent practicable, equitable distribution among commercial ports and among all types of inland carriers." It is also stipulated that, "where consistent with the interest of the military departments" and other provisions of the policy statement, routing via railroad "shall recognize (in an average way but not necessarily in any particular situation) the relative importance of each railroad within the national rail transportation system. . ." Subject to like qualifications, routing by truck is to "recognize the importance of operations by responsible motor carriers to the national transportation system."

Others of the traffic policies relate to equipment use and highway utilization. The former require that care be taken to obtain maximum loading "consistent with the priority need for the property, its safety, handling efficiency, and with due regard for the availability of equipment supply."

The highway utilization policies deal with motor vehicle size and weight limitations. They assert that such limitations "are necessary to assure safe passage over and prevent damage to highway facilities." And they embody a tight policy with respect to exceptional treatment of truck shipments of defense materials. That policy was stated as follows:

1. Except in instances of overriding and urgent military necessity, no vehicular movement which exceeds any legal weight or size limitation will be undertaken over public highways by or for agencies of the Department of the Army, the Navy, or the Air Force unless prior permission is granted by the state or states concerned upon request of authorized representatives of the military departments. Permits for movement of commercial vehicles will be requested only after determination has been made that military necessity requires movement by the mode and manner selected.

2. Only authorized representatives of the military departments may request permits from the state or states concerned when size and weight limitations are involved. Under no conditions shall a carrier be authorized to contact state authorities for such permits.

3. In each instance of overriding and urgent military necessity in which an oversize or overweight commercial movement is made, report will be made to the Director of the Military Traffic Service and a full statement of the circumstances and justification will be supplied.

No Income Tax Deduction For Fines, Bureau Says

Truck operators who violate state laws prescribing maximum weights, loads or size of trucks may not take income tax deductions for the fines they pay, the Commissioner of Internal Revenue has announced.

This ruling revokes a finding made in 1942 when it was held that such truck fines were comparable to tolls rather than penal fines. The bureau's present notice said "additional information" has been brought to its attention, "and consideration of this material has indicated the necessity of the new ruling."

The commissioner made the new ruling effective December 1, and the notice said income tax deductions will not be allowed for fines paid or incurred after that date.

Illinois Supreme Court Upholds C.&E.I. Train Cut

Ruling that competition of private automobiles, public buses and other railroad has a definite bearing on the running of trains that lose money in their operation, the Illinois Supreme Court upheld, on November 27, the Illinois State Commerce Commission's right to grant the Chicago & Eastern Illinois permission to cease running its last passenger train between Chicago and St. Louis, Mo.

The suit was brought by Granite City, Ill., and other communities between Chicago and St. Louis, which contended that discontinuance of the "Cardinal," the C.&E.I. train involved, caused undue hardship and violated the state law that railroads must operate trains even though they lose money for their owners.

Previously, the circuit court of Douglas county (Ill.) had upheld the commission's ruling on the ground that the C.&E.I. had proved that it was losing large sums of money in operating the train because of the competition of private autos, buses, and competing railroads. The supreme court held that this was relative to the commission's decision, reaching its own decision without dissent. Other passenger services continue on almost the entire former route of the "Cardinal," although these services do not provide direct travel between Chicago and St. Louis.

Report on Accident At Lucca, N. D.

Failure properly to control the speed of a Minneapolis, St. Paul & Sault Ste. Marie freight train as it approached a crossing at grade caused the side collision with a Northern Pacific train at Lucca, N. D., on August 16, according to a report by the Interstate Commerce Commission.

The report, by Commissioner Patterson, said the M.St.P.&S.Ste.M. freight crashed into the side of the last car of the N.P. mixed train as the latter was moving through the crossing. One passenger in the N.P. car was killed, while another passenger and two M.St.P.&S.Ste.M. firemen were injured

The accident occurred at 10:25 a.m. in clear weather. The N.P. train (No. 137) consisted of a diesel-electric unit, eight cars, two cabooses, and a combination mail-baggage-passenger car in that order. It was moving at approximately 7 m.p.h. when the collision occurred. The M.St.P.&S.Ste.M. freight (No. 90) was moving about 28 m.p.h. It consisted of a steam helper engine, two diesel-electric units, 103 cars and caboose.

At Lucca, according to the I.C.C. report, the rail lines of the N.P. and

the Soo intersect at about a 70-deg. angle, with the N.P. extending southwest and northeast and the other extending southeast and northwest. Both are single track at this point and are tangent for a considerable distance on either side of the intersection.

The station at Lucca is used by both roads and is located in the northwest angle of the crossing. Among other findings, the commission report noted that the station building obscured the view of the N.P. engine crew as train No. 90 was approaching the crossing immediately prior to the impact.

Discussing the track layout in the vicinity of the intersection, the I.C.C. report said the N.P. track at the crossing is on a 0.5 per cent ascending grade to the west. The M.St.P.&S.Ste.M. line is on a 0.15 per cent descending grade. A stop-sign governing westbound movements on the N.P. is located 200 ft. east of the crossing, and a stop-sign governing eastbound movements on the M.St.P.&S.Ste.M. is located 400 ft. west of the crossing.

Trains operating over this trackage move by timetable and train orders. The commission report quoted from the Consolidated Code of Operating Rules, in effect on both lines, in part as follows: "Trains must approach . . . . railroad crossings at grade . . . . prepared to stop, unless . . . . track is clear." The report also stated that under the rules, "trains approaching the crossing at Lucca must stop short of their respective stop signs."

As the accident was described in the report, train No. 137 approached Lucca from the east. Before going into the intersection it came to a stop approximately 50 ft. east of its stop sign. It then proceeded at about 3 m.p.h. While still about 150 ft. east of the crossing the enginemen saw No. 90 approaching at a distance of about one-half mile. No. 137 began moving through the intersection and, as noted above, the engine crew's vision of the approaching train became obscured by the station building.

When the engine of No. 137 had passed the station, the enginemen heard a series of short whistle signals and saw No. 90 about 1,500 ft. from the crossing. Seeing that the approaching train would not be stopped in time, the speed of No. 137 was increased in an attempt to clear the crossing but the last car was struck near the front end by No. 90.

Equipment Damage

The lead engine on train No. 90 was the steam helper and it was derailed to the south, stopping on its right side and parallel to the track, with its front end 168 ft. east of the crossing and 10 ft. south of the track. The first diesel unit stopped upright, across the track and at right angles to it, and the second diesel stopped upright and parallel to the first. All three were "badly damaged." The first nine cars and the front truck of the tenth car were derailed, and the report noted that eight of the cars were destroyed.

As to the rear car of No. 137, it stopped on its left side and parallel to the M.St.P.&S.Ste.M. track, with the front end about 100 ft. east of the crossing and 20 ft. north of the track. It was an all-steel car, and the report said it was "considerably damaged."

The report included a discussion of the brakes on No. 90, in connection with its examination of why the train approached the crossing as it did. The helper engine had been coupled ahead of the diesel-electric units at Rogers, 35.6 mi. west of Lucca, and after that the engineer of the helper was in control of the brakes. At Valley City, 22 mi. from Lucca, a brake application was effective in reducing speed to comply with a speed restriction, the report said.

When No. 90 was about 1¼ mi. west of Lucca the speed was 51 m.p.h., with the throttle of each engine closed on the descending grade. The report quoted the engineer on the helper engine to the effect that a brake-pipe reduction of about 10 lb. was made more than 1 mi. west of the crossing; and a further reduction of about 10 lb. was made about 4,000 ft. west of the crossing. The engineer said that when the train was about 2,500 ft. from the crossing he became apprehensive the train would not be stopped and moved the brake-valve handle to the emergency position. He said there was only a slight exhaust and the emergency application was not effective.

Saw Train Ahead

Meanwhile, the engineer on the second engine said he saw the N.P. train in the crossing ahead when No. 90 was approximately 1,500 ft. away. The report indicated that he also tried to make an emergency brake application but there was no exhaust. Later, the swing brakeman and flagman, who were in the cupola of the caboose of No. 90, said there was a brake-pipe pressure of 40 lb. after the train stopped. While walking from the caboose to the crossing after the accident, the conductor observed that the brakes were applied on No. 90.

The report went on to say that after the accident the handle of the automatic brake-valve on the helper engine was found to be in emergency position and the double-heading cock was open. The independent brake-valve handle was held in full release position by a wire loop around the brake-valve handle, thus preventing the engine brakes from becoming applied. As to the first diesel unit, the automatic brake valve was found in running position, and the double-heading cock was closed.

An inspection of the air-brake equipment on No. 90, made soon after the accident, showed all angle cocks except the one at the rear end of the caboose were open. A test was made of the brakes of the 94 undamaged cars,

WITH GIFTS APPROPRIATE TO THEIR LINES, a delegation of railroad presidents greeted Canadian National Chairman and President Donald Gordon (center) on his arrival at Chicago on December 2 in connection with his inspection of the Grand Trunk Western. Fifteen active and four retired railroad presidents honored Mr. Gordon at a special luncheon following his arrival. That evening 100 of Chicago's leading industrialists, bankers, railroaders and civic dignitaries, headed by Mayor Martin H. Kennelly, attended a dinner held for him in the Saddle & Sirloin Club.

Present at the welcoming ceremony were, left to right, S. F. Dingle, vice-president—operations, C.N.; Wayne A. Johnston, president, Illinois Central, who gave Mr. Gordon the Mexican serape which he is wearing; H. C. Murphy, president, Chicago, Burlington & Quincy; Mr. Gordon; Fred G. Gurley, president, Atchison, Topeka & Santa Fe; C. M. Roddewig, president, Chicago & Eastern Illinois, holding a box of Florida pompano; Douglas Cole, Canadian consul general in Chicago, and J. W. Barriger, president, Chicago, Indianapolis & Louisville, who gave a 400-lb. slab of Indiana limestone to be used in the C.N.'s Montreal Terminals project

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which disclosed that one AB-type brake was cut out, two K-type brakes were inoperative, and the piston travel on two cars and the caboose was excessive.

Milwaukee Improves Net Since Reorganization

With gross revenues of about $250 million for the year 1950, the Chicago, Milwaukee, St. Paul & Pacific expects to report a net income after taxes of approximately $14½ million, Leo T. Crowley, chairman of the board, declared at a press interview on November 22. This year's gross will about equal the company's all time high of $255 million in 1948, but net income will be nearly three times greater, Mr. Crowley pointed out.

John P. Kiley, president, gave credit for the improved net earnings performance to dieselization, to large-scale mechanization of track crews — permitting more work at less cost in spite of the 40-hr. week and increased wage rates — and to improved revenues from good crops and increased business activity. Economies are also being realized from improvements, such as the treated tie program, started several years past, Mr. Kiley observed.

J. W. Severs, vice-president — finance and accounting, said that in the five years since the road emerged from the courts, about $550 million has been or will be spent on improvements and rehabilitation, including new rail and new equipment. In this time $25½ million (principal value) in first and general mortgage bonds were acquired and cancelled or are held in the road's treasury. In spite of the issuance of approximately $32 million in new securities (including equipment trust certificates), net increase in indebtedness has been only $7 million. Annual interest requirements have been decreased $433,819.

In commenting on the accomplishments of the management since 1946, Mr. Crowley cited the problem posed by the large number of men in executive, supervisory and professional positions who had been kept in their positions beyond the normal retirement period because of manpower shortages resulting from War War II. In the past five years, 401 men have been retired under a pension plan, and have been replaced by younger but experienced men promoted from the ranks. This amounted to almost a complete turnover in executive and supervisory personnel during this period.

Freight Car Loadings

Loadings of revenue freight in the week ended December 2 totaled 739,922 cars, the Association of American Railroads announced on December 7. This was an increase of 38,501 cars, or 5.5 per cent, compared with the previous week; an increase of 45,999 cars, or 6.6 per cent, compared with the corresponding week last year; and a decrease of 64,250 cars, or 8.0 per cent, compared with the equivalent 1948 week.

Loadings of revenue freight for the week ended November 25, which included the Thanksgiving holiday, totaled 701,421 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, November 25

District	1950	1949	1948
Eastern	118,785	114,100	129,511
Allegheny	142,940	127,535	150,709
Pocahontas	47,866	65,292	56,211
Southern	117,043	114,564	112,319
Northwestern .	94,700	71,740	98,936
Central Western	120,058	113,175	113,393
Southwestern .	60,029	58,149	61,857
Total Western Districts	274,787	243,064	274,186
Total All Roads	701,421	664,555	722,936
Commodities:			
Grain and grain products ...	50,352	42,199	45,393
Livestock	10,273	10,718	11,636
Coal	128,469	180,898	144,589
Coke	14,677	11,180	15,387
Forest products	40,006	35,582	33,490
Ore	40,711	16,553	43,189
Merchandise l.c.l.	71,324	72,752	90,283
Miscellaneous .	345,609	294,673	338,969
November 25..	701,421	664,555	722,936
November 18..	837,065	758,972	858,089
November 11..	839,612	635,823	871,679
November 4..	862,184	578,981	843,586
October 28 ..	887,607	591,315	930,973
Cumulative total 47 weeks ..	35,270,376	32,789,888	39,183,882

In Canada.—Car loadings for the week ended November 25 totaled 82,340 cars, compared with 88,284 cars for the previous week, and 78,972 cars for the corresponding week last year, according to the Dominion Bureau of Statistics:

	Revenue Cars	Total Cars Rec'd from Loaded Connections
Totals for Canada:		
November 25, 1950 ..	82,340	33,136
November 26, 1949 ..	78,972	29,441
Cumulative totals for Canada:		
November 25, 1950 ..	3,537,128	1,482,100
November 26, 1949 ..	3,567,277	1,451,760

Eastern Roads Ask 4% Freight Rate Increase

Eastern railroads petitioned the Interstate Commerce Commission on December 1 for a 4 per cent increase in freight rates to meet higher costs of doing business. The railroads pointed out in their petition that they are confronted with expenses for wages, fuel, materials and supplies which have increased by at least $127,113,000 per year since July, 1949. This includes an offer of increased wages to operating employees which has not been accepted.

The I.C.C. was informed that higher rates also are essential because railroads are expending "huge sums of money on improvements in their property and particularly in rehabilitation of their equipment and acquisition of new equipment. This program is vitally necessary in the interests of the commerce of the country and particularly in the interest of defense measures which are being undertaken by the nation." The carriers warned that "present freight rates and charges are not producing a net railway operating income adequate to maintain Eastern District railroads in such a financial condition as will enable them to continue to provide the public with adequate and efficient transportation service of the United States, the commerce of the United States, the postal service and the national defense."

The railroads have granted wage increases to "yardmasters and switchmen's organizations" which, coupled with similar offers to other operating employees, total approximately $51,585,000 bringing the expense increase to the estimated $127,113,000. Other operating employees have not accepted the offers, and the railroads are confronted with other demands for increases in wages. The petition does not take into account "any increased costs which might result from these last-mentioned wage demands," except to the extent reflected in the offer to the operating employees, but the railroads added that: "If operating expenses should be increased subsequent to the filing of this petition, whether by increased costs of fuel, materials and supplies, or by increased wages, it will be necessary to bring the changed situation to the attention of the commission by a supplemental petition."

The proposed increases would apply, with minor exceptions, to "all freight rates and charges within, to, from and via Official Territory." Because of the special nature of rates on anthracite and bituminous coal, the increase proposed for these commodities is 12 cents a net ton or 13 cents a gross ton, except for a few specified movements. The railroads explained that this amounts, however, approximately to 4 per cent, the straight percentage increase proposed for other commodities.

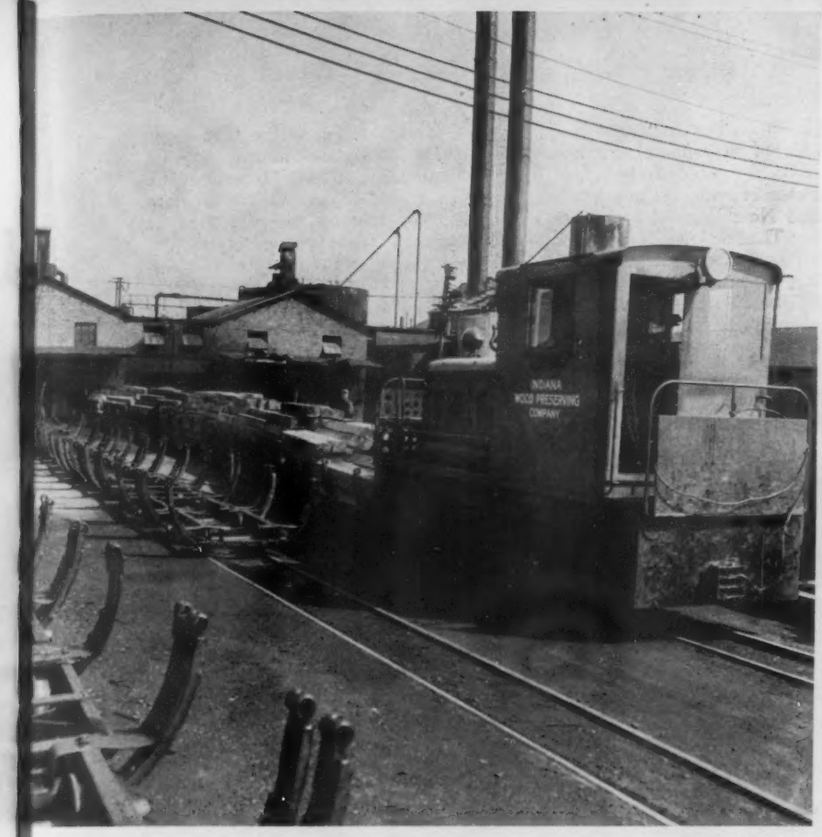
Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended December 2 were announced by the Association of American Railroads on December 7 as follows:

	Surplus	Shortage
Plain Box	1,608	6,833
Auto Box	9	40
Total Box	1,617	6,873
Gondola	502	2,894
Hopper	462	474
Covered Hopper	30	27
Stock	490	52
Flat	214	126
Refrigerator	3,130	0
Other	370	272
	6,815	10,718

D.T.A. Appointments

Harold K. Osgood has been appointed storage specialist on the staff of the Defense Transport Administration, while Lee A. Hyde and Benjamin R. Miller have been appointed



Whitcomb 25-ton Diesel Hydro-Motive Locomotive in operation at the Indiana Wood Preserving Company, Terre Haute, Indiana. Smooth, controlled power is important to this operation.

WHITCOMB HYDRO-MOTIVE DIESELS . . . Ideal for railroad TIE-TREATING PLANTS

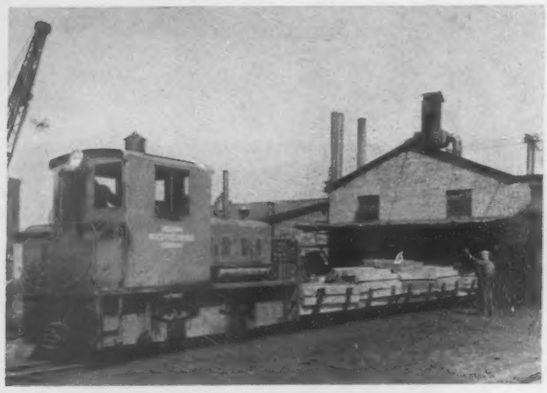
Railroad tie-treating is typical of the many applications where the smooth, uniform, instant power of a Whitcomb Hydro-Motive means faster, lower-cost production. As smooth as an electric drive, but costing far less, the Whitcomb Hydro-Motives increase profits in other ways, too: Maintenance costs are lower because the fluid Hydro-Motive coupling absorbs road bed shocks, reduces engine wear. There is less operator fatigue, greater safety for men, materials, equipment because gear shifting is eliminated . . . power is smooth at any speed.

Whitcomb Hydro-Motives are available in sizes from 10 to 40 tons, Diesel Mechanicals up to 10 tons, Diesel Electrics up to 95 tons. Write today for literature and recommendations on a Whitcomb Diesel Locomotive to meet your needs.

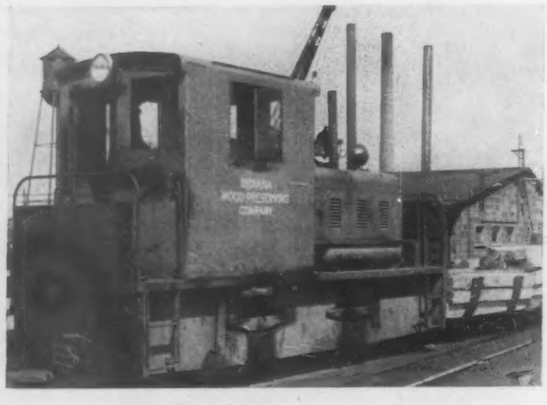
Whitcomb Hydro-Motive pushing loaded trams of treated ties into the storage area at Indiana Wood Preserving Company, Terre Haute, Indiana.

Pulling by cable a cut of trams loaded with untreated ties. Whitcomb's smooth hydraulic power makes it ideal for this application.

Pushing a cut of trams loaded with untreated ties into retort where they will be treated wih creosote under heat and pressure.



Whitcomb's smooth power at any speed, without gear changes, provides for smooth, quick, safe handling of these railroad ties.



There is no power more economical than Diesel, no Diesel locomotive finer than a Whitcomb.

THE BALDWIN GROUP

THE WHITCOMB LOCOMOTIVE CO.

ROCHELLE, ILLINOIS

Subsidiary of

THE BALDWIN LOCOMOTIVE WORKS

consultants—the former on domestic street and highway transportation and the latter on domestic transport manpower.

Mr. Osgood came to D.T.A. from the Fairfax Storage Company of Kansas City, Mo. He has been vice-president of that company in charge of its Washington, D.C., office. He was previously in government service, including a tour of duty as assistant director of the former Office of Defense Transportation's Storage Division.

Mr. Hyde is president of two Memphis, Tenn., companies—Highway Express, Inc., and Dunbar Transport & Storage Co. He will serve D.T.A. as consultant until the beginning of 1951, when he will become its "staff specialist" on street and highway transportation.

Mr. Miller, director of industrial relations for American Trucking Associations, has been "on loan" to D.T.A. since October. He assisted in developing the Manpower Division and served on a temporary basis as director of that division which is now headed by P. L. Siemiller.

Van Horn and Harris Are Consultants to M.T.S.

Charles W. Van Horn, retired vice-president of operations and maintenance of the Baltimore & Ohio, and Max R. Harris, executive vice-president of the Indianapolis Forwarding Company, have been named consultants to the Military Traffic Service of the Department of Defense. M.T.S. is headed by E. G. Plowman, who announced the appointments.

Mr. Van Horn succeeds Henry F. McCarthy, who resigned to become vice-president of Seatrain Lines, Inc. While serving with M.T.S., Mr. Harris will be on leave from the forwarding company vice-presidency.

N.P.A. Orders Cut Use of Nickel, Zinc

Orders M-14 and M-15, issued by the National Production Authority on December 1, will cut the use of nickel and zinc for non-defense purposes, beginning January 1, 1951. M-14 will limit consumption of primary nickel for non-defense purposes to 65 per cent of the average quarterly consumption during the first six months of this year. M-15 will limit non-defense production and use of zinc products to 80 per cent of the production and use during the first six months of this year.

Both orders allow use of the restricted metals for maintenance, repair and operating supplies on a basis equal to 100 per cent of the base-period use. Exempt from the nickel order are persons using less than 250 lb. of primary nickel during a calendar quarter. M-15 exempts from its provisions zinc going to those who use less than 3,000 lb. quarterly, zinc used for "highly specialized" purposes, and for electroplating where it replaces cadmium.

Order M-7, which N.P.A. issued November 13, to cut the non-defense use of aluminum 35 per cent, effective January 1, has been amended. The amendment provides for a gradual transition to the restricted basis, i.e., it provides that the cut during January, 1951, will be only 20 per cent. The cut during February will be 25 per cent, and the full 35 per cent reduction will become effective in March.

Seeks End to I.C.C. Control of Long Island

A bill (H.R. 9852) to eliminate Interstate Commerce Commission jurisdiction over the Long Island was introduced this week in the House of Representatives by Leonard W. Hall, Republican, of Nassau county, New York. Mr. Hall's bill, said to have been a result of conferences with Nassau County Executive J. Russel Sprague, Orrin G. Judd, special counsel, and Chairman Benjamin Feinberg of the New York State Public Service Commission, would, the congressman said, enable the P.S.C. "to assume jurisdiction over regulations touching both operations and, most importantly, safety standards and requirements." The I.C.C., he added, "is not a proper agency to regulate a railroad such as the Long Island."

On December 6 the railroad received a formal request from the Brotherhood of Locomotive Firemen & Enginemen for employment of a second man in the cabs of all its multiple-unit trains, which, like similar trains on other railroads, are presently operated with a single motorman.

J. L. Murphy Retires From I.C.C. Staff

James L. Murphy, assistant to the secretary of the Interstate Commerce Commission, retired on November 30 after 57 years of service on the commission's staff. This was announced by Secretary W. P. Bartel, who called Mr. Murphy "the dean of the commission employees."

Mr. Murphy entered the service of the commission in a clerical position in March, 1893. In recent years, he has acted as liaison officer for the commission with the committees of both houses of Congress.

Pact Assures Air Lines Of Planes, Repair Parts

The Civil Aeronautics Administration and the Civil Aeronautics Board, on the one hand, and the National Production Authority, on the other, have agreed "on a course of action which would insure that no American civil air carrier would be required to discontinue operations due to lack of availability of new transport aircraft or replacement parts." This was announced on November 27 by the federal government's Air Coordinating Committee.

The announcement stated that items of "critical emergency nature" needed by the airlines will be "screened" by the C.A.A. before submitting them to N.P.A. "for issuance of directives as necessary to the suppliers approving the production and delivery of the necessary items." The agreement also contemplates C.A.A. and C.A.B. jointly will negotiate with the military agencies "in regard to programming aircraft and spare parts production so that in allocation to military and civil users the essential requirements of the civil users are satisfied."

"Equalized" Rates Under Study in Canada

Canadian railways have been asked by the Board of Transport Commissioners to draft by mid-January a plan for equalization of freight rates between various parts of Canada. The plan will not necessarily be adopted, but has been requested by the board for study as part of its general freight rate inquiry aimed at equalizing rates.

The equalization inquiry was launched by the board in 1948 on instructions from the federal cabinet, following complaints from several provinces of inequalities and "discrimination" in freight rates as between different regions. Chief complainants were the western provinces, which contended their general level of rates was higher than in the East.

While no details have been made public, it is known that the railways have been working on equalization plans of their own for at least two years. They made reference to such a scheme in a 1948 application for higher freight rates, but did not advise the board of its nature. It is this plan which the transport commissioners now wish to have filed with them by January 15.

That date has been set for the first public hearing in the equalization inquiry, which up to now has been confined to private investigations by board members and their staff experts. It is expected to be the first in a series of sittings that may possibly extend to different sections of the country as well as the capital.

Up to now, the provinces that have been opposing railway rate increases (all but Ontario, Quebec and Newfoundland) have not taken part in the board's general rate inquiry, confining their submissions to the Royal Commission on Transportation, which has been holding a wider investigation into transportation problems generally.

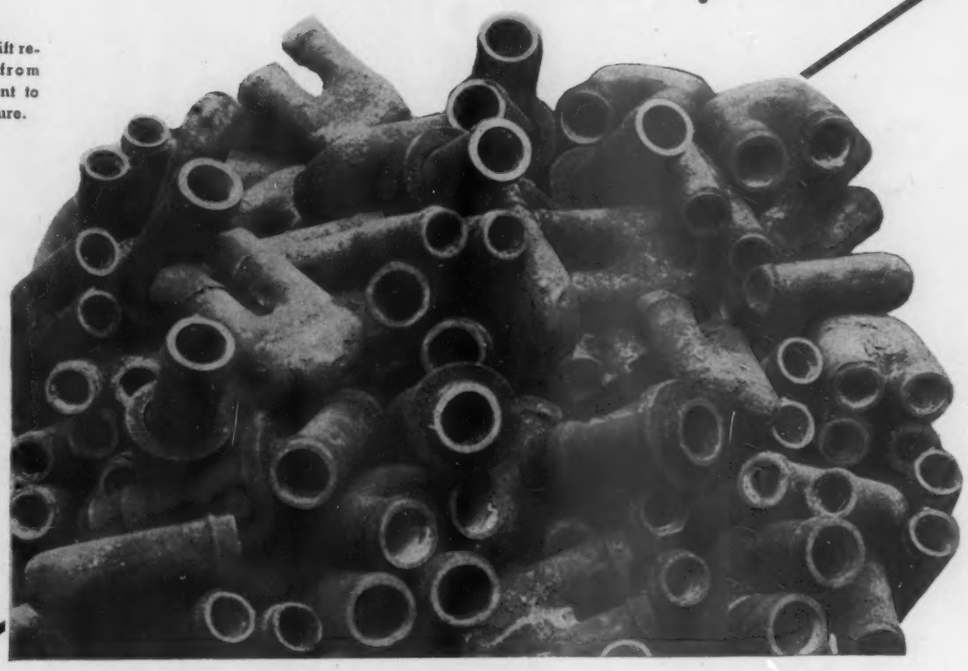
Meantime, Donald Gordon, president of the Canadian National, said in Winnipeg, Man., that a further rise in freight rates is inevitable when the railways raise wages and put the 40-hr. week into effect. "I am not prepared to say to what extent rates will be raised, but the matter is under close examination now," said Mr. Gordon, adding that the question is being held in abeyance until Justice R. L. Kellock

Don't Restrict

Steam Passages of Superheater Units

...It is Expensive

Samples of makeshift repairs removed from units that were sent to us for re-manufacture.



Internal ridges caused by butt welding the return bends onto straight lengths of old and questionable superheater tubing...cause eddy currents of steam with a consequent increase of wall temperature and eventual early failure of the butt welded return bend. Such conditions also *increase pressure drop* with a decrease in cylinder horsepower.

This type of makeshift repairs is poor engineering practice and is one that does not pay when train schedules and failures are considered. You can only control the continuity of the wall structure at the return bend sections of the invisible steam surfaces...by machine-die-forging. These surfaces are subjected to high degrees of superheated steam and high boiler pressures which vary from the firing-up period to maximum operating conditions. They spell quick failure to makeshift repairs.

When superheater units wear out, *play safe* and have them re-manufactured at our plant. Such a set of units are returned to you like new with s-m-o-o-t-h interiors and exteriors and many more years of carefree and profitable service life. This policy PAYS.

THE
SUPERHEATER CO.
Division of
COMBUSTION ENGINEERING-SUPERHEATER, INC.
200 Madison Ave., NEW YORK 16
Bankers Building, CHICAGO 3
Montreal, Canada, THE SUPERHEATER COMPANY, Ltd.
Representing AMERICAN THROTTLE COMPANY, INC.

Superheaters • Superheater Pyrometers • Exhaust Steam Injectors • Steam Dryers • Feedwater Heaters • Steam Generators • Oil Separators • American Throttles

announces his arbitration findings on last August's wage-hour dispute.

Early this week, the cabinet turned down an appeal by seven provinces against the 20 per cent freight-rate increases of the last 14 months, declaring its refusal either to revise the awards made by the Board of Transport Commissioners or to instruct the board to revise them. The increases were awarded to the railways in stages between September, 1949, and last May. They were put into effect progressively, with the full 20 per cent imposed since early June. Estimated to yield about $60,000,000 a year, they were sought by the railways after a 1948 wage increase of 17 cents an hour had been won by rail labor. The provinces, the cabinet said, had not "discharged the onus upon them of proving the Board of Transport Commissioners erred" in making the awards.

12 Eastern RRs Raise "Red Cap" Fee to 25c

Twelve eastern railroads on December 1 increased "red cap" charges to 25 cents for each piece of luggage, because of large deficits incurred in providing porter service. The roads pointed out that in nine increases since 1940 wage rates of red caps have jumped from 30 cents to $1.16 an hour. Railroads announcing the increase were the Boston & Maine; Lehigh Valley; Long Island; New York, New Haven & Hartford; New York Central; Maine Central; New York, Chicago & St. Louis; Norfolk & Western; Chicago, Indianapolis & Louisville; Pennsylvania; Pennsylvania-Reading Seashore Lines, and Wabash. The increase took effect in all stations on their lines, except in Chicago. The 25-cent charge has been in effect since April 1 in union railroad stations at Columbus, Ohio, Cincinnati, Indianapolis, Ind., and St. Louis, Mo., and since June 5 at Washington, D. C.

Wrecks Cited in Plea For Radio-Rules Act

Congress could perform "a worthwhile service to the nation" by enacting legislation like that proposed in the so-called radio-rules bill, Representative Price, Democrat of Illinois, said in a statement which he inserted in the December 4 issue of the Congressional Record. Referring to the Long Island's Thanksgiving-eve accident, and to two recent accidents involving troop trains, Mr. Price said he was "convinced" that these and many other accidents "would have been prevented by two-way radio communication systems."

Before Mr. Price made his statement, Congress had received proposals for investigations of the accidents he mentioned. Representative Marcantonio, American Laborite of New York, introduced House Resolution 869 to investigate the collision on the Long Island; and Representative Rogers, Republican of Massachusetts, introduced House Resolution 870, which would call upon the secretary of the army and the chairman of the Interstate Commerce Commission to furnish the House "full and complete information" with respect to the troop-train accidents.

On December 5, Senator Langer, Republican of North Dakota, introduced Senate Resolution 369, which would direct the Senate committee on interstate and foreign commerce to investigate the Long Island collision.

The pending radio-rules bill would broaden the Interstate Commerce Act's section 25, which now contains provisions of the Signal Inspection Act, to give the I.C.C. authority over installations of radio and other train-communication systems, and over train-operating rules in connection with such installations and installations of signaling devices over which the commission already has authority under the present law. The proposed legislation is embodied in H.R. 378 and S. 238, bills sponsored by the chairman of the House and Senate committees on interstate and foreign commerce—Representative Crosser of Ohio and Senator Johnson of Colorado, Democrats.

Mr. Price's statement was entitled "Rail Safety Legislation." After commenting on the recent accidents, he went on to recall that he had "said on many occasions on this floor" that such accidents "are tragic lessons on the need of two-way radio communications on all our railroads." He also said that he had been calling for the past four years for enactment of legislation directing the I.C.C. "to carry on a continuous study of communications systems," and giving the commission authority to order any carrier to install such systems "to improve safety."

Then came the expression of Mr. Price's conviction that two-way radio communication would have prevented the Long Island and troop-train accidents. The congressman conceded that it is "not possible to discount human failures as a cause of railroad accidents," but he suggested that "train radio and other automatic safety devices were invented to minimize such unavoidable possibilities."

Armed-Service Personnel To Have Low Holiday Fares

Round-trip coach fares on the basis of two cents per mile will be available to armed-service personnel traveling in uniform during the holiday season from December 15 until January 10, 1951, inclusive. This was announced in Washington, D. C., on December 5 by E. B. Padrick, chairman of the Trans-Continental and Western Passenger Associations.

The fare cut was decided upon at a December 4 meeting of passenger traffic officers in Chicago, Mr. Padrick said. He also pointed out that the round-trip tickets involved will have a return limit of January 15, and that stop-over and baggage privileges will be available under the reduced fares. He added that "additional saving to military personnel going home for the holidays" would be available if Congress should enact legislation to exempt furlough travel from the 15 per cent tax on amounts paid for transportation of persons.

Such legislation is proposed in two bills which were introduced recently—H.R. 9801 and H.R. 9840, sponsored, respectively, by Representatives Javits of New York, Republican, and McCormack of Massachusetts, Democrat.

Third-Quarter Truck Traffic Up 27 Per Cent

Freight hauled by intercity Class I motor carriers increased 27.2 per cent in the third quarter of this year, compared with the same 1949 period, according to American Trucking Associations. The quarterly traffic index, based on 1941 as 100, was at an all-time high of 220, the previous high having been the second-quarter figure of 211. The index for 1949's third quarter was 173.

The A.T.A. statement showed that all regional trucker groups reported traffic increased in the third quarter as compared with 1949. The increases ranged from 32.9 per cent in the Central region to 16.4 per cent in the Northwestern region. The breakdown by commodities showed increases in all 10 groups, the range there having been from 60.8 per cent for heavy machinery to 7.7 per cent for film and associated products.

The comparisons were based on preliminary reports from 1,406 common and contact truckers. They hauled 51,113,654 tons of freight in this year's third quarter, compared with 40,172,039 tons in the like 1949 period. The 27.2 per cent overall increase was the net result of increases of 28.2 per cent and 21.2 per cent for common and contract truckers, respectively.

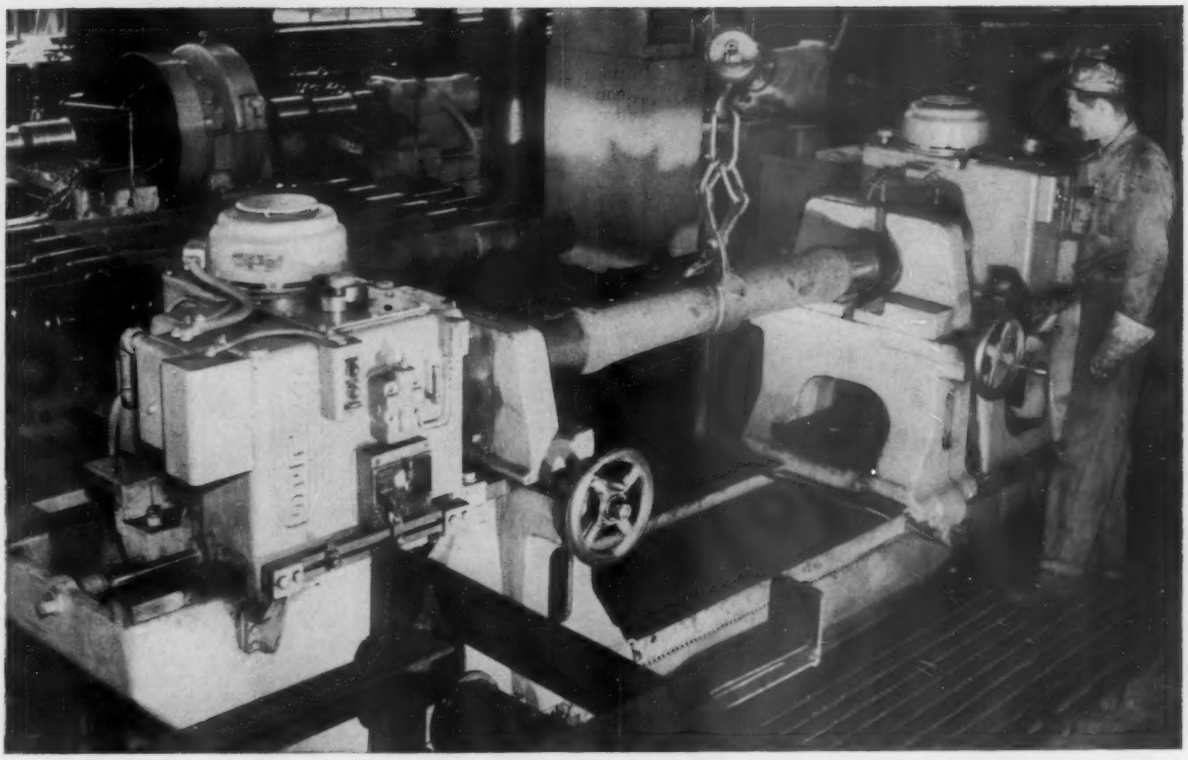
Group Will Advise N.P.A. Of Transportation's Needs

The National Production Authority's Advisory Committee on Priorities and Administration now has a Subcommittee on Transportation Requirements. This was revealed by Major General Philip B. Fleming, the undersecretary of commerce for transportation, in a December 4 address at the annual convention of the American Association of State Highway Officials in Miami, Fla.

The subcommittee, created by N.P.A. Administrator William H. Harrison, includes representatives of the Department of Defense, Department of the Interior, Defense Transport Administration, Maritime Administration, Civil Aeronautics Administration, Civil Aeronautics Board, National Advisory Committee for Aeronautics, and Bureau of Public Roads.

The subcommittee's chairman, General Fleming said, will be the deputy

(Continued on page 61)



Axles re-centered in 3 minutes

back to original alignment . . .

This is the Niles Hydraulic Centering Machine in operation at the Glenwood wheel shops of the B&O.

The Baltimore & Ohio reports that an axle alone, or an axle with wheels mounted on it, can be centered on both ends in three minutes, floor-to-floor time. At this rate, direct savings in labor amount to about 10% per year on the investment.

An additional saving, of at least 10% more, results from the accuracy of the centers, and the resulting saving in time and metal in subsequent machining. Axles can be accurately centered on the collars. Therefore the new centers are in exact alignment and concentricity with the original machining. With such near-perfect centers—within ±.003" concentricity—both an axle and the wheels mounted on it can be turned faster, with less material removed—with longer life of wheels, and with far better balance of wheel sets. Moreover, these savings in turning will be realized again and again as axles now going through the shop are returned for wheel attention later.

This Niles Hydraulic Centering Machine is designed to cut costs and improve quality of output of major wheel shops. It is a fitting companion to the Niles profiling attachment for car-wheel lathes, since, without accurate centers in axles, highly accurate concentricities in wheel treads are impossible.

With this machine, axles are chucked on collars, journals or, if unmounted, on wheel seats. Operation from that point on is fully automatic — traverse of both heads, boring to uniform depth, and return traverse.

Machine can also be used to check concentricity of journals and wheel treads. It will accommodate axles with inside or outside journals up to 6½" dia. (up to 12" if special chucking jaws are ordered), and mounted wheel sets up to 57" dia. It is powered by two 3-hp motors, utilizes hydraulic feed, and is completely self-lubricated.

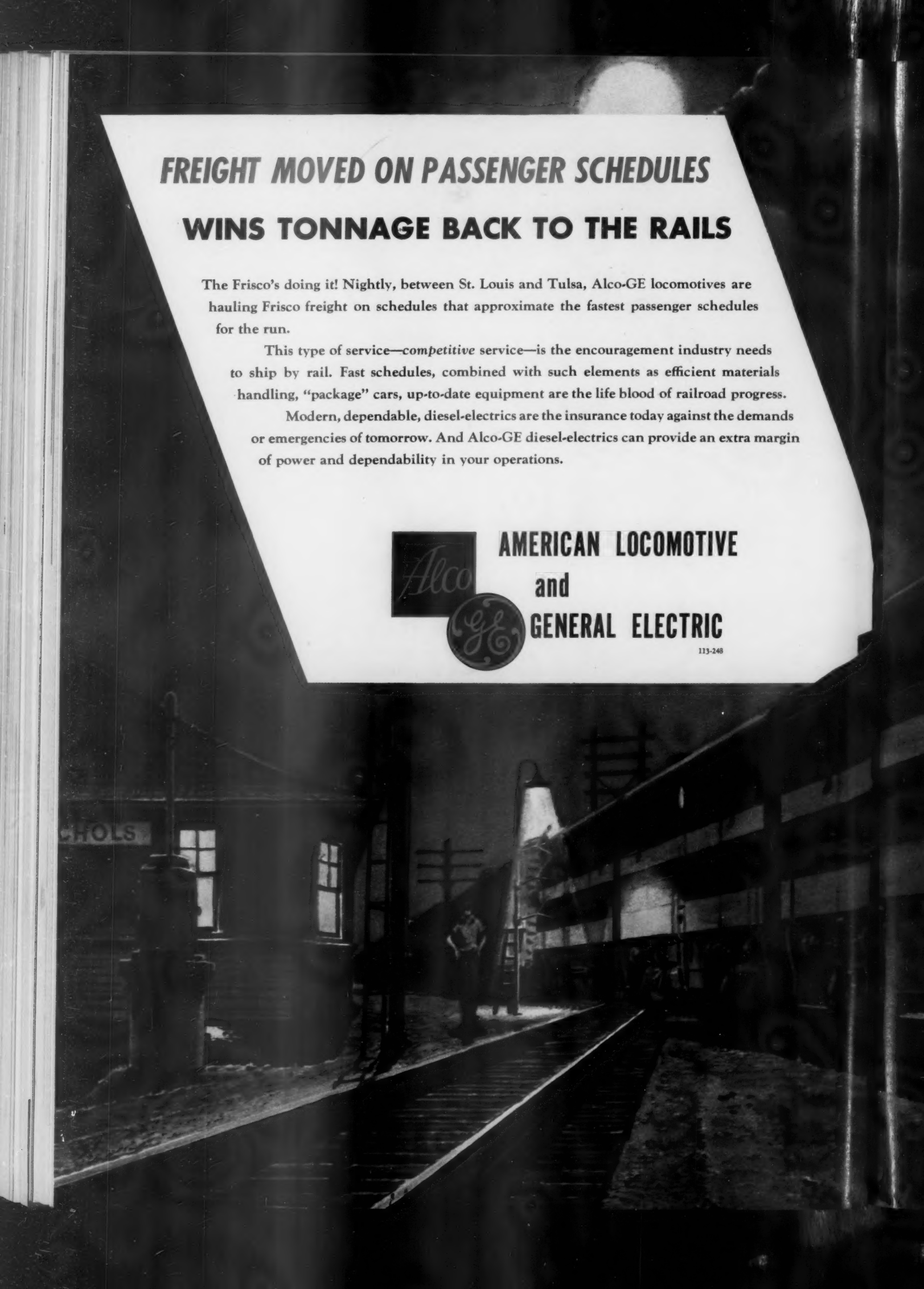
For further information, call the Lima-Hamilton sales offices in New York or Chicago, representatives in other cities, or write directly to Lima-Hamilton Corporation, Hamilton, Ohio.

LIMA HAMILTON CORPORATION

NILES TOOL WORKS CO.

A division of the Lima-Hamilton Corporation

HAMILTON, OHIO


FREIGHT MOVED ON PASSENGER SCHEDULES
WINS TONNAGE BACK TO THE RAILS
The Frisco's doing it! Nightly, between St. Louis and Tulsa, Alco-GE locomotives are hauling Frisco freight on schedules that approximate the fastest passenger schedules for the run.
This type of service—*competitive* service—is the encouragement industry needs to ship by rail. Fast schedules, combined with such elements as efficient materials handling, "package" cars, up-to-date equipment are the life blood of railroad progress.
Modern, dependable, diesel-electrics are the insurance today against the demands or emergencies of tomorrow. And Alco-GE diesel-electrics can provide an extra margin of power and dependability in your operations.
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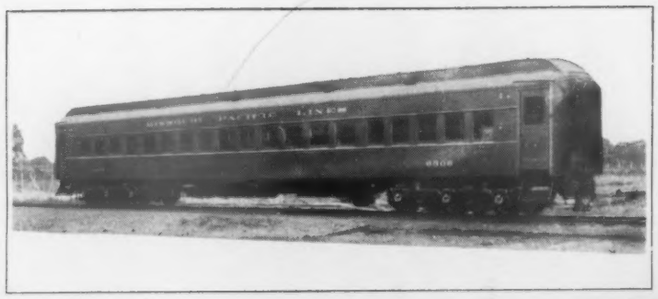


MISSOURI PACIFIC LINES

CONVERSION WITH THERMOPANE PAYS OFF

. . . in passenger comfort . . . with lower maintenance costs!

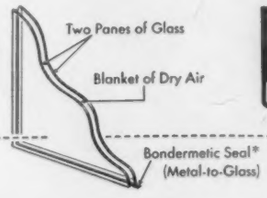
Missouri Pacific Lines are using *Thermopane** insulating glass, in their current conversion program.

By reducing condensation, *Thermopane* provides a better view, and by insulating the car interior from summer's heat and winter's cold it permits more efficient and economical control of temperatures. Both are important additions to passenger comfort, leading to increased passenger traffic.

Equally important, *Thermopane* cuts window cleaning costs materially. This sealed-at-the-factory double glass insulating windowpane requires washing only on the two exposed surfaces. There's no condensation or annoying film between the panes. May we give you more information on how *Thermopane* can fit into *your* conversion plans?

*®

FOR BETTER VISION SPECIFY THERMOPANE
MADE WITH POLISHED PLATE GLASS



LOF GLASS

Thermopane

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50125 Nicholas Building, Toledo 3, Ohio

(Continued from page 56)
undersecretary of commerce, whom he will designate under authority granted by Secretary Sawyer's recent order explaining functions of the undersecretaryship which the general holds. (See *Railway Age* of December 2, page 83.) As explained by General Fleming, the subcommittee will operate as follows:

"Requirements estimates of each agency represented will be brought to this subcommittee and discussed thoroughly. My staff will attempt to harmonize the estimates and make them fit together into a total transportation program. If the subcommittee cannot reach an agreement, or if my staff has serious questions about some major aspects of the requirements as submitted, which my deputy cannot resolve, I shall attempt to resolve them so that a program can be submitted to General Harrison to which all can subscribe.

"If, of course, one claimant feels deeply that it is being unjustly treated, that claimant can appeal over my head and, if necessary, over the head of General Harrison. There will be no star chamber proceedings. It will be my purpose to see that each claimant gets a fair hearing and all possible help from my staff. Of course everyone cannot be pleased at one time. There will not be enough steel or copper or aluminum, for instance, to satisfy everyone—highway, pipelines or railroads. But we shall endeavor to place the resources at our disposal where they will do the most good for the country, and for its defense."

SUPPLY TRADE

Baldwin, Lima-Hamilton Agreement Consummated

The Baldwin Locomotive Works and the Lima-Hamilton Corporation on December 4 consummated their

Marvin W. Smith

previously announced consolidation agreement (see *Railway Age* of November 18, page 76). Under terms of the agreement, Baldwin purchased and acquired substantially all Lima's assets on a share-for-share basis through the Fifth-Third Union Trust Company, Cincinnati, Ohio, Lima's depositary and agent. The name of the Baldwin Locomotive Works has been changed to Baldwin-Lima-Hamilton Corporation.

Heading Baldwin-Lima-Hamilton are Marvin W. Smith, who remains as

George A. Rentschler

president, and George A. Rentschler, chairman. Mr. Rentschler has been chairman of Lima-Hamilton's executive committee. Charles E. Brinley has resigned as chairman of the Baldwin board, but will continue as a director. sets in exchange for shares of Baldwin common stock, which are now available for distribution to Lima shareholders

William A. Callison, vice-president of the **American Locomotive Company** in charge of western regional sales, has been assigned charge of eastern regional sales, with head-

William A. Callison

quarters at New York, and **William F. Lewis,** district sales manager at St. Louis, Mo., has been appointed also a vice-president of the company, and assigned charge of western regional sales, with headquarters at Chicago. The company also announced that **Stephen G. Harwood,** formerly district sales manager at New York, has been appointed sales manager at the Montreal Locomotive Works, Alco's Canadian affiliate.

Mr. Callison has been associated with American Locomotive since 1929,

William F. Lewis

when he completed a special apprenticeship course at the company's Schenectady, N. Y., plant. Two years later he became a sales representative at Chicago and in 1941 was appointed district sales manager. He was appointed vice-president in January, 1947. Mr. Lewis joined the Chicago sales

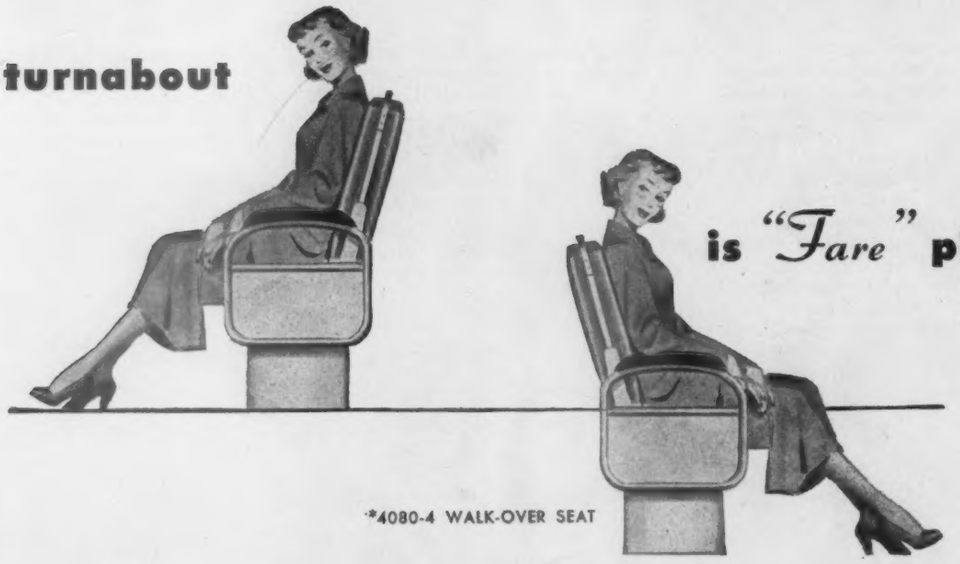
Stephen G. Harwood

office of American Locomotive in 1934 and was transferred to the St. Louis sales office in 1937. He was appointed district sales manager in January, 1946. Mr. Harwood became associated with American Locomotive at the Chicago sales office in 1936. In 1940 he was named district sales manager at San Francisco and in 1947 was transferred to New York in the same capacity.

The **Dallett Company** of Philadelphia, Pa., which was purchased in 1947 by the **Reed Roller Bit Company,** has been moved to the Cleco division plant in Houston, Tex.

The **Graybar Electric Company** has appointed two new branch house managers in the New York district, as follows: **John T. Porter,** former manager of the Albany house, has been transferred to Rochester, N. Y., in the

turnabout



is "*Fare*" play

*4080-4 WALK-OVER SEAT

Time and cost saving, too, with Karpen mechanically improved walk-over seating. Newest walk-over on the market, Karpen incorporates the most advanced technical design. Brisk, modern styling makes this attractive transportation seating especially desirable in surburban service. Commuters appreciate Karpen Comfort Engineering . . . you'll like the easy maintenance.

In the nation's most recent Gallery Cars . . . it's the Karpen "Commuter"* . . . . designed to 1950 progress-standards.

S. Karpen & Bros. **TRANSPORTATION SEATING**

624 South Michigan Avenue, Chicago · One Park Avenue, New York

George B. Cross Company

Exclusive Sales Agents

KARPEN SEATING . . . POINT OF CONTACT BETWEEN THE COMPANY AND ITS PASSENGERS

George W. Vinal, who has been named engineering consultant and advisor to the Electric Storage Battery Company. Mr. Vinal recently retired as chief of the National Bureau of Standards' electrochemistry section after more than 42 years with the government

Fred M. Garland, who has been appointed assistant to the president and general traffic manager of the Pressed Steel Car Company. Mr. Garland will be actively engaged in the company's laminated structures program, the first development of which was its recently introduced lightweight "Unicel" freight car

A. C. Kukral (above), has been appointed resident sales engineer of the Whiting Corporation, at its new sub-sales office recently opened at 637 Penton building, Cleveland, Ohio. Mr. Kukral will be under supervision of H. E. Reynolds, district manager at Pittsburgh, Pa. R. E. Florine (below), formerly sales engineer at the New York district sales office, has been appointed district manager of the new district sales office in Seattle, Wash., at 350 Skinner building. Mr. Florine will be responsible for sale of Whiting engineered products (cranes, foundry equipment and railroad equipment) in Washington, Oregon and Idaho, and also will handle sale of Swenson evaporators and chemical machinery

same capacity, and **Frank C. Sweeney,** former manager, telephone sales and broadcast equipment sales for the district, has been appointed manager at Albany, succeeding Mr. Porter.

Paul L. Chamberlain, manager of sales for the commercial equipment division of the **General Electric Company,** has appointed **H. W. Wales** as district sales manager for two-way radio communications equipment, with headquarters at Syracuse, N. Y. Mr. Wales' territory includes New England, New York, New Jersey, Maryland, Virginia and northeastern Pennsylvania. New district representatives for communications equipment also have been appointed, as follows: **H. W. Chew,** St. Louis, Mo.; **E. L. Dodge,** Indianapolis, Ind.; **F. W. Hall,** Detroit, Mich.; **R. W. Massey,** Oklahoma City, Okla.; **J. B. Warren,** Cincinnati, Ohio, and **R. P. White,** Charlotte, N. C. **R. W. Robinson** has been appointed district representative for microwave communications equipment at Dallas, Tex., and **W. R. Sinback** has been appointed district representative for all commercial equipment division standard products to a number of government agencies in Washington, D. C.

Robert T. Daily has been promoted to field engineer in charge of the Chicago office of the **Lord Manufacturing Company.** He will report to Charles L. Freel, manager of the field engineering department at the home office, Erie, Pa.

Merritt W. Jones has been appointed manager of the newly created Baltimore, Md., sales district of the **Signode Steel Strapping Company.** The district comprises Virginia, and portions of Maryland, West Virginia and North Carolina. Mr. Jones joined Signode in January, 1946, and has worked as sales engineer in the Philadelphia and Virginia territories.

EQUIPMENT AND SUPPLIES

G.T.W. Maps Equipment And Maintenance Program

The Grand Trunk Western is planning a heavy program of equipment purchases and needed maintenance projects if anticipated 1950 net income of $3,882,393 is realized, Donald Gordon, chairman and president of this Canadian National subsidiary, told the board of directors at a Detroit, Mich., meeting on December 4. A study, he said, has shown the advisability of acquiring 62 diesel-electric road and switching locomotives and up to 1,400 freight cars of various types. The feasibility of obtaining new passenger equipment also is under consideration, as is increased mechanization. Other major improvements, Mr. Gordon said, would include improved ballast, drainage, roadway and bank widening.

FREIGHT CARS

The **Central of New Jersey** is inquiring for 500 50-ton box cars.

The **Chicago, Rock Island & Pacific** has ordered 3,000 50-ton box cars, of which 2,000 will be built by the Pullman-Standard Car Manufacturing Company and 1,000 by the American Car & Foundry Co.

The **Gulf, Mobile & Ohio** has ordered 700 50-ton 40½-ft. box cars from the American Car & Foundry Co. and 300 50-ton 41½-ft. low-side gondola cars from the Pullman-Standard Car Manufacturing Company. Delivery of both lots is scheduled for the fourth quarter of 1951. The road's intention to purchase these cars, plus 400 70-ton ore cars, was reported in last week's *Railway Age*, page 88.

The **Orinoco Mining Company,** a subsidiary of the United States Steel Corporation, is inquiring for 700 ore cars for use in Venezuela.

LOCOMOTIVES

The **Central of New Jersey** is inquiring for 31 diesel-electric locomotive units, including 14 1,600-hp. transfer units with six traction motors, one 1,000-hp. road-switching and 16 1,200-hp. yard-switching units.

The **Paulista** of Brazil has ordered 12 1,600-hp. diesel-electric road-switch-

ing locomotive units from the American Locomotive - General Electric Companies. This purchase was inadvertently omitted from a news item on page 88 of last week's issue which reported orders for a total of 40 Alco-G. E. diesel units by seven foreign railroads.

The **Southern** has placed orders for 101 diesel-electric locomotive units (including one for the Yadkin), as follows: Electro-Motive Division of General Motors Corporation—43 1,500-hp. freight, 25 1,500-hp. general purpose and 7 2,250-hp. passenger units; American Locomotive-General Electric Companies—16 1,600-hp. road-switching units (one for the Yadkin); Fairbanks, Morse & Co.—10 1,600-hp. road-switching units. The road's intention to spend an estimated $17,000,000 for 100 diesel units was reported in last week's issue, page 88.

SIGNALING

The **Chicago, Rock Island & Pacific** has ordered from the Union Switch & Signal Co. material to install automatic signals on approximately 50 mi. of single track between Biddle, Ark., and Perry. The order includes style H-2 searchlight signals, relays, rectifiers, transformers, switch circuit controllers and housings. Field installation will be handled by railroad forces.

ORGANIZATIONS

A.S.M.E. Installs New Officers

At the annual meeting of the American Society of Mechanical Engineers, held in New York, November 28 and 29, the following members of the Railroad Division executive committee were installed for 1951: Chairman, C. E. Pond, assistant to superintendent motive power, Norfolk & Western, Roanoke, Va.; K. A. Browne, research consultant, Chesapeake & Ohio, Cleveland, Ohio; C. B. Bryant, chief engineer, technical board, Wrought Steel Wheel Industry, Chicago; G. W. Bohannon, chief mechanical officer, Chicago & North Western, Chicago; and E. M. Van Winkle, vice-president, American Steel Foundries, New York.

New officers appointed to the General Committee included J. S. Newton, manager, engineering department, Baldwin Locomotive Works, Eddystone, Pa.; M. C. Haber, general mechanical engineer, Union Pacific, Omaha, Neb.; C. D. Stewart, vice-president, Westinghouse Air Brake Company, Wilmerding, Pa.; B. C. Gunnell, chief mechanical engineer, Southern, Washington, D. C.; A. G. Hoppe, engineer, research and development, Chicago, Milwaukee, St. Paul & Pacific, Milwaukee, Wis.; and Alexander Ross, mechanical engineer, American Locomotive Company, Schenectady, N. Y.

J. Calvin Brown, engineer and patent attorney of Los Angeles, Cal., is the newly elected president of the society. Regional vice-presidents for 1951 are Henry R. Kessler, manager, Republic Flow Meters Company, New York; Stephen D. Moxley, vice-president, American Cast Iron Pipe Company, Birmingham, Ala.; Dr. John T. Rettaliata, dean of engineering, Illinois Institute of Technology, Chicago; and Carl J. Eckhardt (reelected), professor of mechanical engineering and superintendent of utilities, University of Texas, Austin, Tex. Directors-at-large are Lionel J. Cucullu, assistant to chief engineer, New Orleans Public Service, Inc., New Orleans, La.; and Harold E. Martin, district manager, Babcock & Wilcox Co., New York.

Cincinnati, Ohio, will be the scene of the 96th regular and 27th annual meeting of the **Ohio Valley Transportation Advisory Board** on December 13. A special luncheon session, sponsored jointly by the **Cincinnati Traffic Club, the Cincinnati Chamber of Commerce Forum,** the **Cincinnati Board of Trade** and the **Traffic League of Cincinnati,** will be held in the Netherland Plaza Hotel, headquarters for the entire meeting, at 12:15 p.m.

The **Chicago Railroad Superintendents Association** has elected W. E. Curley of the Illinois Central as president. Other officers for the ensuing year include R. D. Clousing, Atchison, Topeka, & Santa Fe, first vice-president, and T. D. Ash, Grand Trunk Western, second vice-president.

The annual meeting of the **American Society of Traffic and Transportation** will be held in the Mayflower Hotel, Washington, D.C., at 10 a.m., December 14. Business of the meeting will include consideration of several amendments to the society's constitution, reports of committees, and election of directors and regional vice-presidents. There will be addresses by E. F. Hamm, Jr., president of Traffic Service Corporation and publisher of Traffic World, and by Edward K. Laux, traffic manager of the Port of New York Authority. The luncheon speaker will be E. G. Plowman, vice-president of the society, vice-president of the United States Steel Corporation, and presently director of the Military Transport Service of the U.S. Department of Defense. Mr. Plowman will speak on "Professional Standards for Traffic and Transportation Management." Mr. Hamm's subject will be "The Value of Traffic Education," and Mr. Laux will speak on "Restoration of Coastwise Shipping." Charles H. Vayo, general traffic manager of the Eastman Kodak Company, and president of the society, will preside at the meeting.

Meetings & Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chcaigo 2, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 5-7, 1951, Atlantic City, N. J.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C.R.R. of N. J., 143 Liberty St., New York 6. N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise L Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 12-14, 1951, Hotel Stevens, Chicago, Ill.

AMERICAN ASSOCIATION OF TRAVELING PASSENGER AGENTS.—C. A. Melin, P. O. Box 5025, Cleveland 1, Ohio.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 17-19, 1951, Hotel Stevens, Chicago, Ill.

(Continued on page 75)

CONSTRUCTION

Alaska.—Two additional contracts have been awarded in connection with construction at Anchorage, Alaska, of electric generating facilities being built jointly by the Chugach Electric Association, Inc., and the Alaska Railroad. The Worthington Pump & Machinery Corp. has been awarded a contract for furnishing three steam condensers and auxiliaries for $39,200; and the Westinghouse Electric Corporation has been awarded a contract for furnishing, delivering and supervising installation of a complete indoor-type unit substation for $62,687.

Baltimore and Ohio.—This road has begun construction of a new bridge on its main line overpassing the Pulaski Highway on the outskirts of northeast Baltimore, Md. The project, costing $800,000, has been undertaken at request of the city of Baltimore to permit the highway to be continued into the city as a dual lane route. The old bridge permits only a single line roadway. Under agreement, the city is to pay 60 per cent of the cost of building the bridge and reconstructing the highway beneath it. The B.&O. is to pay the remaining 40 per cent.

The new bridge will be a 145-ft. span, replacing a present span of 60 ft. With its completion, expected in November, 1951, the city will be able to carry the two lanes of Route 40 into the junction of Monument and Fayette streets, thus eliminating a traffic bottleneck. Like the present bridge it will provide for three tracks — two for the B.&O.'s main line between Baltimore and New York, and one for a siding. The location is about 45 ft. northeast of the present one. Construction will require some 52,000 cu. yd. of excavation, the pouring of more than 3,000 cu. yd. of concrete, and the use of 550 tons of structural steel.

To realine its tracks, the B.&O. will lay more than a mile of new track, and will relocate some 3,500 ft. of present

For
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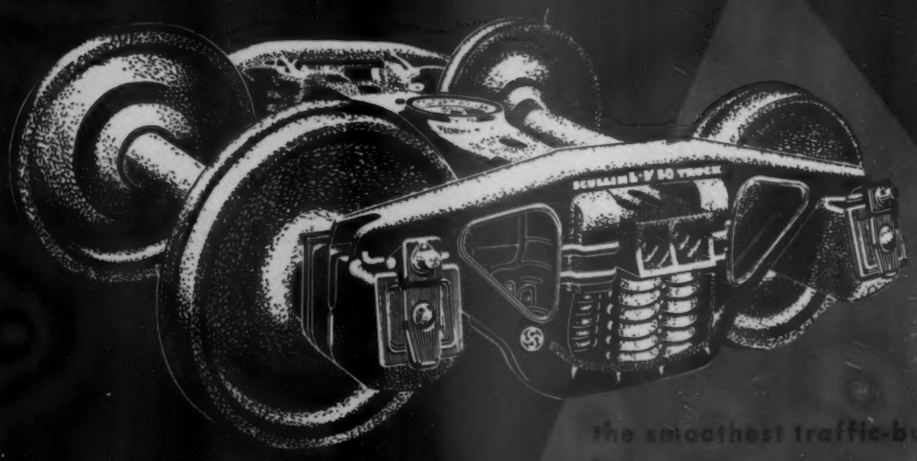
of your "extra-fare" freight... SCULLIN L 50 V TRUCKS
LATERAL VERTICAL
CUSHIONED MOTION



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trackage. More than a mile of present trackage will be removed altogether. The new bridge will have a clearance of 16 ft., permitting use of the underpass by all vehicles of legal height.

Construction will be handled by the railroad under supervision of Chief Engineer A. C. Clarke. J. W. Jones is regional engineer in charge, and the project will be supervised by S. D. Dunn, assistant regional engineer, and W. E. Webster, B.&O. field engineer.

Chicago & Western Indiana.—A mail platform, canopy and office building are being constructed at the southeast corner of Federal and Taylor streets in Chicago. The platform is 20 ft. by 200 ft., of concrete construction with a steel canopy. The office building, of concrete and brick construction, will be 20 ft. square.

Grand Trunk Western.—A concrete block addition to roundhouse office and stores building at Pontiac, Mich., is being constructed by Darin & Armstrong, Inc., Detroit, Mich. The addition will provide locker and washroom facilities for enginemen.

New York Central.—This road has placed in regular operation in the Rochester, N. Y., area new facilities to improve its main-line freight service. The facilities include extensive improvements in track layout and signaling, together with a new plant at Wayneport, N. Y., 12 mi. east of Rochester, for icing perishable freight bound for New York, Boston, Mass., and intermediate New York state and New England cities. Track layout and signal changes will permit mainline freight trains to use the Central's West Shore affiliate as a cut-off in both directions to by-pass Rochester and thereby save time.

Because of its location, the new Wayneport facility will make it unnecessary to continue icing perishables on eastbound through trains in the Buffalo, N. Y., and Albany areas, as had been the custom. Thus, additional time will be saved by a single icing, instead of the traditional double icing, although perishables destined to New England points will be re-iced at West Springfield, Mass., when necessary. The new Wayneport plant will handle as many as 40 cars for icing at one time. Since Wayneport is a regular coaling point for steam locomotives, the icing tracks have been so arranged that locomotives can be serviced while refrigerator cars are being iced. Facilities for fueling diesel-electric locomotives also are planned.

Pacific Electric.—This road has been authorized by the I.C.C. to construct a 2.8-mi. connecting track between two of its present lines in the Los Angeles, Cal., area, at a cost estimated at approximately $380,361. The new line is expected to speed up freight service in the area, and will permit savings of about $25,000 a year, the commission said. The P.E. is also undertaking a large modernization program, a part of which contemplates the addition of approximately 150 motor coaches to replace existing rail passenger service. In connection with this modernization program, the commission found that operations over several of the road's present lines are conducted at substantial losses. It authorized the abandonment of various segments, totaling about 22.4 mi.

Southern Pacific.—This road has been authorized by the I.C.C. to construct a 6-mile branch line between White City, Ore., and a connection with the S.P.'s main line at Tolo. The commission found that the branch is needed to develop timber and other natural resources in the White City area. Total cost of the construction is estimated at $321,465. (See *Railway Age* of August 26, page 63.)

Texas & Pacific.—Reconstruction and modernization of the passenger station at Mineola, Tex., is being undertaken by M. Clint Brown, general contractor, Longview, Tex., at a cost of approximately $62,000.

FINANCIAL

Carolina & Northwestern.—*Leases.*—This road, a subsidiary of the Southern, has applied to the I.C.C. for authority to lease for 50 years each of the following roads: Danville & Western; High Point, Randleman, Asheboro & Southern; Yadkin; and Blue Ridge. At the same time the D. & W., the High Point, and the Yadkin asked permission to extend the maturity dates of their respective bond issues for the term of the new lease. The High Point and the Yadkin also seek authority to reduce the interest rate on their respective issues from 6 per cent to 5 per cent. All of the outstanding bonds of the four roads are owned by the Southern, and are pledged under mortgages of the latter. The bonds of the Yadkin matured October 1, 1930, while those of the D. & W. matured October 1, 1936, and those of the High Point matured April 1, 1939. The bonds of the Blue Ridge will mature July 1, 1951.

Under the new leases, which would be "separate but similar," annual rental payments would consist principally of interest on the bond issues. According to the application, the new arrangement would result in savings in accounting and taxes, plus some possible increase in traffic because solicitation would be made simpler.

Long Island.—*Draper Nominated as Trustee.*—William Henry Draper, Jr., vice-president of Dillon, Read & Co., and a reserve major general in the United States Army, has been nominated to succeed David E. Smucker and Hunter L. Delatour as trustee of the Long Island. Mr. Draper's nomination was submitted to U. S. District Judge Harold M. Kennedy, who has jurisdiction over reorganization proceedings for the railroad, by the Long Island Rail Road Commission which was appointed by New York State Governor Thomas E. Dewey following the recent wreck at Kew Gardens, N. Y. (See *Railway Age* of December 2, page 72.) The nomination must be approved by Judge Kennedy and by the I.C.C.

Seaboard Air Line.—*Control of G.F.&A.*—This road has been authorized by the I.C.C. to purchase 5,500 shares of first preferred stock of the Georgia, Florida & Alabama, and thereby acquire control of the latter road. The transaction will involve approximately $200,947, and the acquisition will be made through Seaboard's wholly owned subsidiary, Southeastern Investment Company. (See *Railway Age* of September 2, page 98.) Following the acquisition, Seaboard will operate G.F.&A. properties under a long-term lease, paying rental of approximately $200,000 a year.

New Securities

Applications have been filed with the I.C.C. by:

ST. LOUIS-SAN FRANCISCO.—To assume liability for $5,595,000 of series H equipment trust certificates, to finance in part 25 diesel-electric locomotives and 700 freight cars. The equipment, listed below, would cost approximately $7,014,235.

	Description and Builder	Estimated Unit Cost
5	1,200-hp. switching locomotives (Electro-Motive Division, General Motors Corporation)	$97,500
6	1,500-hp. freight-passenger locomotives (Electro-Motive)	168,535
10	1,500-hp. road-switching locomotives (Electro-Motive)	149,172
4	1,200-hp. switching locomotives (Fairbanks, Morse & Co.)	97,870
500	50-ton box cars (Pullman-Standard Car Manufacturing Company)	5,292
200	50-ton high side gondola cars (Pressed Steel Car Company)	4,930

The certificates, to be dated December 1, would mature in 15 annual installments of $373,000 each, beginning December 1, 1951. They would be sold on the basis of competitive bids, with the interest rate to be set by such bids.

WESTERN PACIFIC.—To issue $22,000,000 of first and refunding mortgage series A bonds, dated January 1, 1951, and scheduled to mature January 1, 1981. Proceeds from sale of the bonds would be used to refund the road's existing mortgage debt, which totals $16,113,300, and to reimburse the company treasury in part for the cost of additions and betterments made between January 1, 1946, and June 30, 1950. The bonds would be sold by competitive bids, with the interest rate to be set by such bids.

The road's present mortgage indebtedness consists of $10,000,000 in first mortgage 4 per cent series A bonds, and $6,113,300 of general mortgage 4½ per cent series A income bonds. The former would be redeemed "at the earliest practicable date," while the latter would be called for redemption May 1, 1951. The road said it hopes to obtain a more favorable interest rate.

Division 4 of the I.C.C. has authorized:

CHICAGO & EASTERN ILLINOIS.—To assume liability for $3,270,000 of series H equipment trust certificates, to finance in part four diesel-electric locomotives and 700 box cars costing an estimated $4,100,000. (See Railway Age of November 11, page 104.) The certificates will be dated December 1, and will mature in 30 semi-annual installments of $109,000 each, beginning June 1, 1951. Division 4 approved a selling price of 99.06916 with interest at 2¾ per cent—the bid of Halsey, Stuart & Co. and eight associates—which will make the average annual cost of the proceeds approximately 2.9 per cent. The certificates were reoffered to the public at prices yielding from 1.7 to 2.95 per cent, according to maturity.

(*News Department continued on next left-hand page*)

Only RAILWAY AGE

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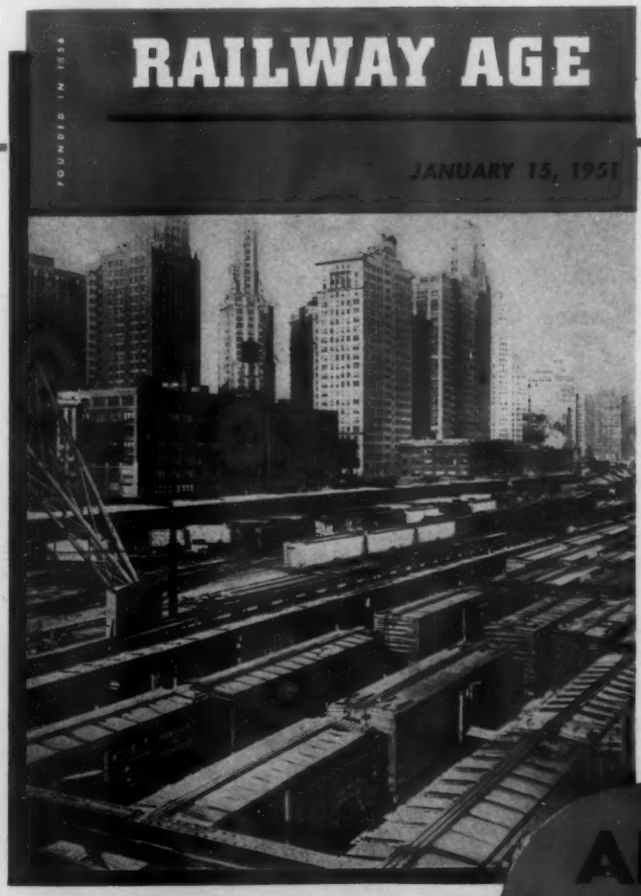

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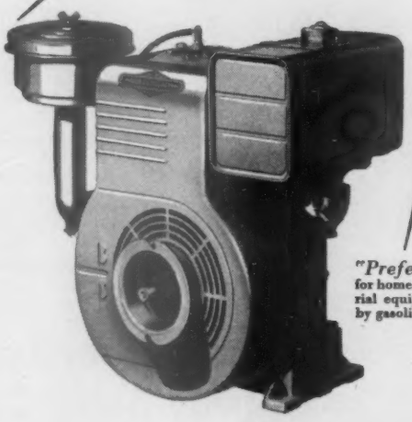
ANNUAL REVIEW and OUTLOOK NUMBER
Closes Dec. 26

Beginning with the first issue in 1951, Railway Age will be dated Monday. Last forms close two weeks before date of publication; annual numbers close three weeks before date of publication.

Precision

IN AIR-COOLED POWER



"Preferred Power" for home, farm and industrial equipment — powered by gasoline engines.

Precision at every step:

- ✔ Precision Control of Materials
- ✔ Precision Production Tools
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That's why owners want Briggs & Stratton single-cylinder, 4-cycle, air-cooled engines—the finest ever built—on their gasoline-engine powered equipment.

BRIGGS & STRATTON CORP., Milwaukee 1, Wis., U.S.A.

4 CYCLE BRIGGS & STRATTON GASOLINE ENGINES — World Wide FACTORY SUPERVISED SERVICE

In the automotive field Briggs & Stratton is the recognized leader and world's largest producer of locks, keys and related equipment.

Dividends Declared

Alabama Great Southern.—ordinary, $4, payable December 22 to holders of record December 4.

Atchison, Topeka & Santa Fe.—common, $2, payable March 2, 1951, to holders of record January 26, 1951; 5% preferred, $2.50 semi-annual, payable February 1, 1951, to holders of record December 29.

Bessemer & Lake Erie.—$3 preferred, $1.50, payable December 1 to holders of record Novmber 15.

Boston & Albany.—$2.25, payable December 30 to holders of record November 30.

Delaware & Hudson.—$1, quarterly, payable December 28 to holders of record December 11.

East Mahanoy.—$1.25, semiannual, payable December 15 to holders of record Decemoer 5.

Gulf, Mobile & Ohio.—50¢, payable December 28 to holders of record December 8.

Maine Central.—6% prior preferred, $1.50, quarterly, payable January 2, 1951, to holders of record December 27.

Minneapolis & St. Louis.—25¢; extra, 25¢, both payable December 15 to holders of record December 11.

Mobile & Birmingham.—4% preferred, $2, semiannual, payable January 2, 1951, to holders of record December 1.

Nashville & Decatur.—7½% guaranteed, 93¾¢, payable January 2, 1951, to holders of record December 21.

New York & Harlem.—common, $2.50, semi-annual; 10% preferred, $2.50 semiannual, both payable January 2, 1951, to holders of record December 13.

Pittsburgh, Fort Wayne & Chicago.—common, $1.75, quarterly, payable January 2, 1951, to holders of record December 8.

Reading.—4% 2nd preferred, 50¢, quarterly, payable January 11 to holders of record December 21.

Richmond, Fredericksburg & Potomac.—6% guaranteed preferred, $1.50, extra; 7% guaranteed preferred, $1.25, extra, both payable December 20 to holders of record December 11.

Seaboard Air Line.—75¢, quarterly; extra 50¢, both payable December 27 to holders of record December 15.

Sharon.—$1, semiannual, payable December 1 to holders of record November 20.

Southern Pacific.—$1.25, quarterly; 50¢, extra, both payable December 18 to holders of record November 27.

Ware River.—guaranteed, $3.50, semiannual, payable January 3, 1951, to holders of record December 15.

Security Price Averages

	Dec. 5	Last week	Last year
Average price of 20 representative railway stocks	48.40	47.77	40.11
Average price of 20 representative railway bonds	96.00	96.10	87.53

RAILWAY OFFICERS

EXECUTIVE

George D. Hughey, general manager of the DELAWARE & HUDSON, has been elected vice-president and general manager, with headquarters as before at Albany, N. Y.

Robert M. Clark, general attorney and commerce counsel for the ATCHISON, TOPEKA & SANTA FE at Chicago, has been named to succeed **James P. Reinhold** as representative of the road's president in Washington, D. C. Mr. Reinhold's appointment as assistant to the president—public relations was announced in the *Railway Age* of August 12.

OPERATING

Creation of three new positions—assistant superintendent of freight transportation at Detroit, Mich., Cleveland, (*Continued on page 73*)

50 YEAR report to our customers~

FROM DATE OF INCORPORATION ON NOVEMBER 23, 1900 TO DECEMBER 31, 1949

THE COMPANY RECEIVED:			
From customers for products purchased by them		$5,122,702,261	
Dividends received, interest earned, and other income		76,068,236	
Total revenues		$5,198,770,497	
THE COMPANY PAID OUT OR PROVIDED:			
For raw materials, supplies, and services bought	$2,766,354,971		
Provision for depreciation (wear and tear or obsolescence) of plants, buildings, machinery and equipment and for depletion of coal, iron ore and limestone, etc., by mining operations	270,852,769		
Federal, State, local and miscellaneous taxes	267,462,953		
Interest and other costs on long-term debt (including dividends of $27,265,805 paid to preferred shareholders)	117,724,128		
Total costs		3,422,394,821	
Leaving for wages and salaries of employees, dividends to shareholders, and amount required to be retained by company for needs of the business		*$1,776,375,676	100.00%
***OUT OF WHICH THERE WAS PAID:**			
Employment costs (pay rolls, vacations, social security taxes, insurance and pensions paid to or for account of employees)		$1,474,693,687	83.02%
To common shareholders as dividends		125,126,950	7.04
Amount retained in the business for present and future needs and to assure steady work for employees		176,555,039	9.94
Total		$1,776,375,676	100.00%

Your patronage and the American system of free enterprise have helped make this company an important factor in the steel industry. Our future depends on keeping America free, so that any group of citizens may organize a business, at any time--with the expectation that it, too, may grow strong--provide jobs, supply needed products and achieve success in the next 50 years. In the preservation of the American way of life lies our future hope.

THE YOUNGSTOWN SHEET & TUBE CO. 1900 YOUNGSTOWN 1950 50 YEARS OF SERVICE

The Youngstown Sheet and Tube Company

General Offices--Youngstown 1, Ohio
Export Offices--500 Fifth Avenue, New York

MANUFACTURERS OF CARBON, ALLOY AND YOLOY STEELS

ELECTROLYTIC TIN PLATE - COKE TIN PLATE - WIRE - COLD FINISHED CARBON AND ALLOY BARS - PIPE AND TUBULAR PRODUCTS - CONDUIT - RODS - SHEETS - PLATES - BARS - RAILROAD TRACK SPIKES.

No other locomotive builder has such complete research and development facilities

The Locomotive Development Center at La Grange is equipped for assembly of a complete locomotive apart from regular manufacturing operations. Continuous research, continuous testing, continuous product development are among the reasons why General Motors locomotives are first choice in the rapidly growing Diesel fleets of American railroads.

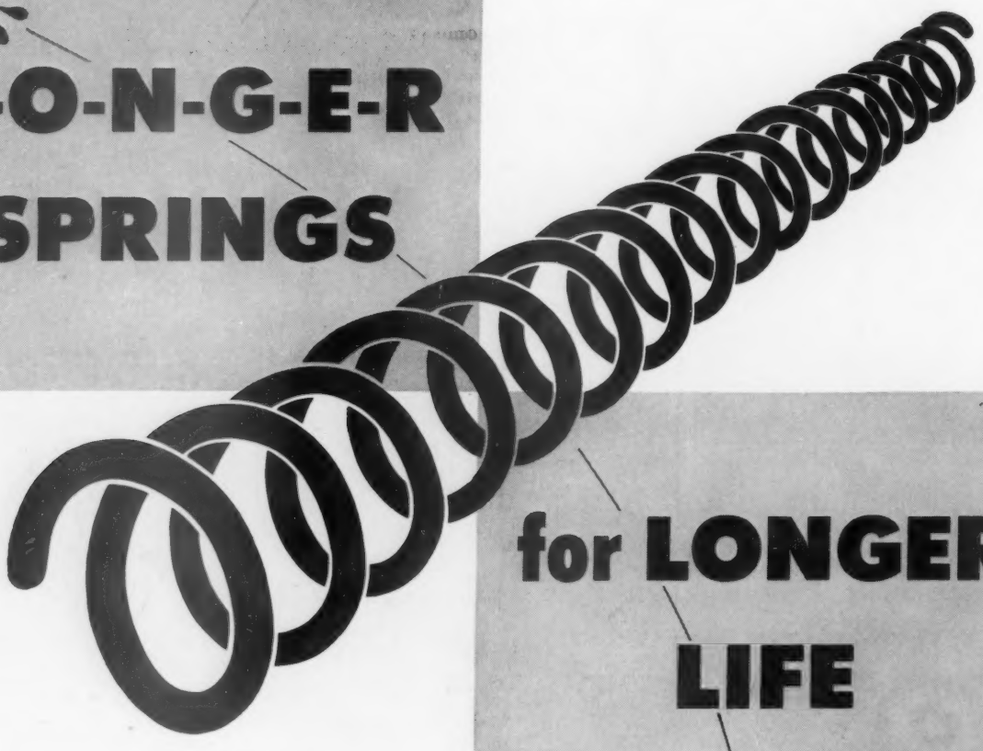
GENERAL MOTORS LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

General Motors, La Grange, Ill.

Home of the Diesel Locomotive

L-O-N-G-E-R SPRINGS for LONGER LIFE

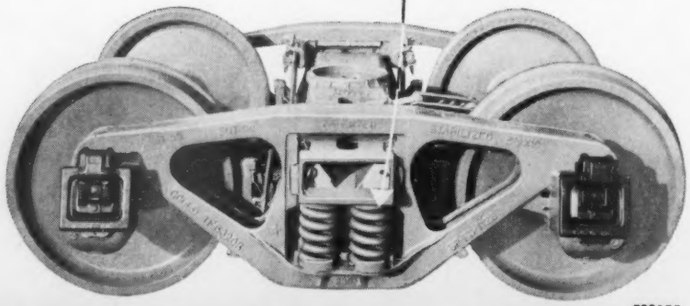


Barber's longer side springs assure longer and more effective spring-control life for Barber Trucks. There is very little letdown in the rate of spring control during many years of rugged service.

That means greater protection for lading and lower upkeep costs for the car structure.

Over 250,000 car sets of BARBER STABILIZED TRUCKS have been ordered

The side springs increase the capacity of the Barber Truck since they carry their share of the load.



5231RR

STANDARD CAR TRUCK COMPANY
332 SOUTH MICHIGAN AVENUE, CHICAGO, ILLINOIS

(Continued from page 68)

Ohio and Indianapolis, Ind.—has been announced by the NEW YORK CENTRAL. **J. C. Houston,** trainmaster at Sandusky, Ohio, has been appointed to the Cleveland post with jurisdiction over the Lines West district. **John Dring,** trainmaster at Jackson, Mich., will have jurisdiction over the Michigan Central district with headquarters at Detroit, and **C. D. Buford,** whose headquarters will be at Indianapolis, will have jurisdiction over the Big Four district, including the Peoria & Eastern and the Louisville & Jeffersonville Bridge & Terminal. **Daniel Barrett, Jr.,** trainmaster for the CHICAGO RIVER & INDIANA, has been appointed trainmaster for the INDIANA HARBOR BELT. Mr. Barrett succeeds **D. B. Ingold,** transferred to Sandusky as trainmaster, vice Mr. Houston. **F. M. Francis,** assistant trainmaster at Jackson, was promoted to trainmaster, succeeding Mr. Dring.

Clyde E. Buckley has been appointed director of dining car service and commissary departments of the MISSOURI-KANSAS-TEXAS, with headquarters at San Antonio, Tex. Mr. Buckley's appointment fills the vacancy caused by the recent death of **S. L. Altschuler.** (See page 103 of last week's *Railway Age.*)

The CHICAGO, ROCK ISLAND & PACIFIC has announced that the headquarters of General Manager **C. L. Franklin** have been transferred from Chicago to Kansas City, Mo., in view of the growing importance of the latter city to the Rock Island.

James F. Lynch has been appointed acting superintendent of the WESTERN PACIFIC's Eastern division, with headquarters at Elko, Nev., vice **J. J. Duggan,** who has been granted an indefinite leave of absence at his own request. **W. G. Howell,** trainmaster at Stockton, Cal., has been appointed assistant superintendent at Elko, succeeding Mr. Lynch. He, in turn, is succeeded by **J. J. McNally,** trainmaster, who was transferred in that capacity from Oroville, Cal., to Stockton. **P. F. Prentiss,** trainmaster at Keddie, is transferred to Oroville to fill the vacancy caused by Mr. McNally's transfer.

M. I. Dunn, general superintendent of the CHESAPEAKE & OHIO at Peru, Ind., has been appointed assistant superintendent freight transportation at Richmond, Va. **Kenneth T. Reed,** division superintendent at Grand Rapids, Mich., succeeds Mr. Dunn as general superintendent at Peru. **Buford G. Nash,** assistant division superintendent, has been promoted to division superintendent at Grand Rapids. **W. E. Foran,** general agent at Chicago, succeeds Mr. Nash as assistant superintendent at Grand Rapids.

TRAFFIC

Neil McCormick, assistant foreign freight agent of the NEW YORK CENTRAL at New York, has been appointed assistant general freight agent at Washington, D. C.

C. A. Sherer, commercial agent for the CHICAGO, AURORA & ELGIN, has been promoted to general freight and industrial agent, with headquarters in the road's Wells Street terminal, Chicago. He will have charge of the establishment of new industries on the railroad.

E. A. McCarthy, assistant traffic manager of the WESTERN PACIFIC, at Chicago, has retired after 21 years of service with the company. He has been succeeded by **A. H. Lund,** general agent at Seattle, Wash., who, in turn, has been succeeded by **Charles Fischer,** general agent at Reno, Nev. Mr. Fischer has been succeeded by **Frank M. Rowe.**

SPECIAL

J. T. Williams, assistant to the works manager of the PENNSYLVANIA at Altoona, Pa., has been appointed superintendent of safety at Philadelphia, Pa., succeeding **T. H. Carrow,** who has retired after more than 50 years of railroad service, of which he devoted 40 years to safety work.

BALLAST IS SCREENED BY CONTRACT — ELIMINATING INVESTMENT BY RAILROADS IN THIS ONE-OPERATION EQUIPMENT . . .

Stone ballast cleaned by the Speno method is thoroughly cleaned because it is screened twice. In order to obtain a thorough cleaning, two passes are necessary to restore the ballast to as clean a condition as when it was originally placed in the track. The two passes are accomplished in less time than a single pass by other mechanical methods.

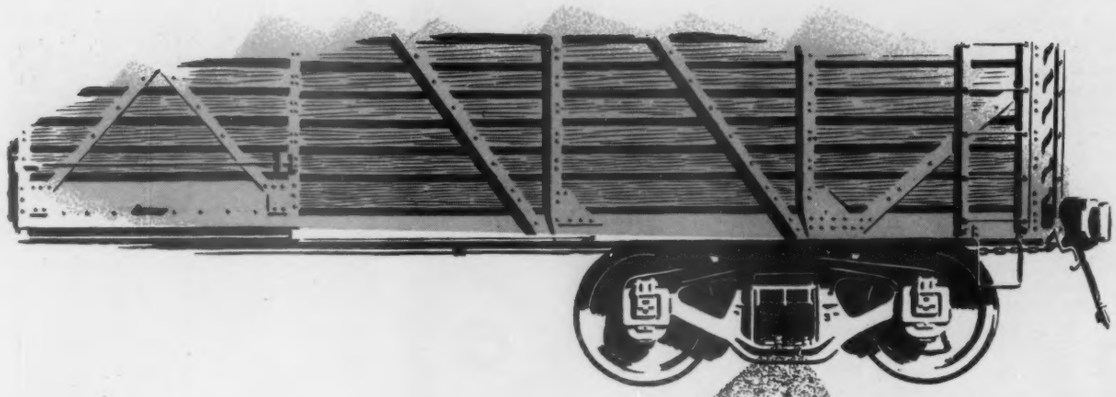
Preferably, the ballast is cleaned ahead of a general track raise, and under the Speno method, no cribbing is necessary. Because of the drainage that the Speno method attains, the cleaning lasts from one general raise until it is time for another general raise, normally over a period of from three to six years, depending on conditions.

Speno equipment, working under traffic without interference with railroad operation, (the track adjacent to the one being worked is not fouled by our equipment in working position) easily keeps ahead of track raising programs.

The high production and low cost of this service are worthy of consideration.

FRANK SPENO RAILROAD BALLAST CLEANING CO. INC.

306 North Cayuga Street Ithaca, New York



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jounces, and assure a smooth ride that protects the pay-load
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increasing the life of your rolling stock and roadbed.
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You will receive fast efficient service plus a
product that's backed by many years of pioneering in spring design.
Call your Alco sales representative in New York, Cleveland,
Chicago, St. Louis, St. Paul, San Francisco.

Railway Steel-Spring Division

AMERICAN LOCOMOTIVE COMPANY

Meetings & Conventions

(Continued from page 64)

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—E. L. Beardsley, Denver & Rio Grande Western, Denver 2, Colo. Annual meting, April 18-20, 1951, Chase Hotel, St. Louis, Mo.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting , March 13-15, 1951, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—W. B. Grumley, Nickel Plate Road Magazine, 432 Terminal Tower, Cleveland 1, O.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, 2000 Massachusetts Ave., N. W., Washington 6, D. C. Annual meeting, October, 1951, New Orleans, La.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Spring meeting and Committee Week, March 5-9, 1951, Netherland Plaza Hotel, Cincinnati, O. Annual meeting, June 18-22, 1951, Chalfonte-Haddon Hall, Atlantic City, N. J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York 18, N. Y.

Railroad Division—E. L. Woodward, *Railway Mechanical and Electrical Engineer*, 79 W. Monroe St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—H. L. Dawson, 839 Seventeenth St., N. W., Washington 6, D. C. Annual meeting, April 24-26, 1951, Hotel Stevens, Chicago, Ill.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.—R. A. Ellison, Cincinnati Chamber of Commerce, Federal Reserve Bank Bldg., Cincinnati 2, O.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, 1951, St. Louis, Mo.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.—J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—A. H. Grothmann, 59 E. Van Buren St., Chicago 5, Ill.

Fire Protection and Insurance Section.—W. E. Todd, 59, E. Van Buren St., Chicago 5, Ill.

Freight Station Section—W. E. Todd, 59, E. Van Buren St., Chicago 5, Ill.

Medical and Surgical Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting. April 2, 1951, Drake Hotel, Chicago, Ill.

Protective Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting May 8-10, 1951, St. Francis Hotel, San Francisco, Cal.

Safety Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 5-7. 1951, Hotel Statler, Detroit, Mich.

Engineering Division.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 13-15, 1951, Palmer House, Chicago, Ill.

Electrical Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill.

Signal Section.—R. H. C. Balliet, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 10-12, 1951, Edgewater Beach Hotel, Chicago, Ill.

Mechanical Division.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 26-28, 1951, Congress Hotel, Chicago, Ill.

Electrical Section.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill.

Purchases and Stores Division. — Transportation Bldg., Washington 6, D. C.

Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago, 5, Ill. Annual meeting; May 22-24, 1951, St. Francis Hotel, San Francisco, Cal.

Motor Transport Division.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, June 11-14, 1951, Hotel Biltmore, New York, N. Y.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, October, 1951, Palm Beach, Fla.

Traffic Department.—Walter J. Kelly, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF INTERSTATE COMMERCE COMMISSION PRACTITIONERS.—Sarah F. McDonough (Executive Secretary) 2218 I.C.C. Building, Washington 25, D. C.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS. —R. P. Schaffer, Chicago & North Western Ry., 400 W. Madison St., Chicago 6, Ill. Annual meeting, January 22-24, 1951, Ponce de Leon Hotel, St. Augustine, Fla.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Gulf, Mobile & Ohio R. R., 104 St. Francis St., Mobile 5, Ala. Annual meeting, May 2-4, 1951, Hotel Buena Vista, Biloxi, Miss.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION. —L. R. Gurley, Modern Railroads, 201 N. Wells St., Chicago 6, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—D. W. Kramer, Relay Depot Mail Room, East St. Louis, Ill. Regular meetings fourth Tuesday of each month, except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—J. A. Dingess, 8637 South Euclid Ave., Chicago 17, Ill. Regular meetings, second Monday of each month, except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

COORDINATED RAILROAD MECHANICAL ASSOCIATIONS. —C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION.—W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February, March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION. —C. M. Lipscomb 1721 Parker St. North Little Rock, Ark.

MAINTENANCE OF WAY CLUB OF CHICAGO.—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except Decem-

Every drink a reminder of your hospitality

With every drink of water your passengers are reminded of your hospitality — when you print a cheerful greeting on your AJAX* Cups. Thousands of times a day these little messages spread good will, advertise your facilities, tell about your system in a way that can't be missed.

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*. . . or on the familiar round, flat-bottom AERO Cup.

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PAPER CUP DIVISION
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puttin's a breeze . . .
his mind's at ease

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- **THERMOSTAT FIRE ALARM SYSTEM** for detecting fire in the engine compartments.
- **SMOKE DETECTING SYSTEM** for detecting fire underneath the locomotive and in battery boxes.
- **BUILT-IN CARBON DIOXIDE TYPE FIRE EXTINGUISHING SYSTEM** for extinguishing fire inside the locomotive.
- **ONE OR TWO CARBON DIOXIDE TYPE HOSE RACK FIRE EXTINGUISHING UNITS,** equipped with 50 feet of hose and a special discharge horn, for extinguishing fire inside or outside the locomotive.
- **FOAM AND WATER TYPE FIRE EXTINGUISHING SYSTEM,** equipped with a special playpipe, for extinguishing fire underneath the locomotive or along the right-of-way.
- **TWO 15 OR 20 POUND SIZE SQUEEEZ-GRIP CARBON DIOXIDE TYPE HAND PORTABLE FIRE EXTINGUISHERS,** plus **ONE 4 POUND SIZE DRY CHEMICAL TYPE FIRE EXTINGUISHER** for extinguishing fire during the incipient stage.

Remember fire doesn't wait . . . let an expert C-O-TWO Railroad Fire Protection Engineer help you in planning complete and up-to-date fire detecting and extinguishing facilities for your diesel locomotives and other property now. Our experience is at your disposal . . . no obligation of course.

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MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y.

METROPOLITAN MAINTENANCE OF WAY CLUB.—John S. Vreeland (Act. Secy.), Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in February, April, October, and December. Next meeting, February 20, 1951, Skyline Room, Hotel Shelburne, New York, N. Y.

MILITARY RAILWAY SERVICE VETERANS.—S. Thomson, 1061 W. Sheridan Road, Chicago 40, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Austin L. Roberts, Jr., 7413 New Post Office Bldg., Washington 25, D. C.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—John N. Lind, National Supply Company, Grant Building, Pittsburgh, Pa.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Miss Lois E. Casavant, 930 F. St., N. W., Washington 4, D. C.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE. — Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—R. B. Fisher, 59 E. Van Buren St., Chicago 5, Ill.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—R. C. Sabens, New York, Chicago & St. Louis, Terminal Tower, Cleveland 1, O.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB. — D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION.—G. H. Wells, Northern Pacific Railway, St. Paul 1, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION. — R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB.—S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 614 Pittsburgh Life Bldg., Pittsburgh 22, Pa. Regular meetings, fourth Thursday of each month, except June, July, August, September and December, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION. — J. McC. Price, Allen-Bradley Company, 445-447 N. LaSalle St., Chicago 10, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION. — L. H. Peters, New York Central, Room 1213, 139 W. Van Buren St., Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, 60 E. 42nd St., New York 17, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 912 Shell Building, St. Louis 3, Mo.

ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 17-19, 1951, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHEASTERN RAILWAY DIESEL CLUB. — H. W. Brewer, Seaboard Air Line, Jacksonville, Fla. Regular meetings, second Tuesday in February, April, June, August, October and December, 9:30 a.m., Mayflower Hotel, Jacksonville, Fla.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—E. E. Humble, High Point, Thomasville & Denton, High Point, N. C.

TORONTO RAILWAY CLUB.—D. L. Chambers, P. O. Box 8, Terminal "A," Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS. — Luther Fritts, 155 West Summit St., Somerville, N. J.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1, Ill. Meetings scheduled for: December 16, 1950, and third Monday of February, March, April and May, 1951, Hotel Sherman, Chicago, Ill.

WESTERN ASSOCIATION OF RAILWAY TAX COMMISSIONERS.—A. B. Olson, 210 South Canal St., Chicago, Ill. Regular meetings, first Wednesday of each month, Traffic Club, Palmer House, Chicago, Ill.

OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF SEPTEMBER 1950 AND 1949

Item	United States		Eastern District		Southern District		Western District	
	1950	1949	1950	1949	1950	1949	1950	1949
Miles of road operated at close of month	226,282	219,659	53,338	53,431	46,037	46,017	126,907	120,211
Revenues:								
Freight	$725,013,590	$569,807,538	$260,423,864	$202,651,830	$140,686,767	$106,577,434	$323,902,959	$260,578,274
Passenger	71,622,953	69,833,445	37,311,233	37,257,737	10,058,627	9,748,098	24,253,093	22,827,610
Mail	[1]29,536,460	18,136,560	7,238,015	6,889,045	3,562,219	3,398,191	18,736,226	7,849,324
Express	7,993,787	7,064,557	2,996,191	2,284,915	1,316,784	1,081,927	3,680,812	3,697,715
All other operating revenues	37,865,442	30,448,613	17,903,487	13,753,647	5,495,560	4,355,181	14,466,395	12,339,785
Railway operating revenues	872,032,232	695,290,713	325,872,790	262,837,174	161,119,957	125,160,831	385,039,485	307,292,708
Expenses:								
Maintenance of way and structures	112,114,861	101,760,094	41,815,008	36,273,419	22,104,375	22,139,642	48,195,478	43,347,033
Depreciation	11,701,601	10,454,588	5,333,179	4,458,693	1,974,336	1,892,482	4,394,086	4,103,413
Retirements	1,542,300	1,302,805	689,439	309,193	349,133	162,520	503,728	831,092
Deferred maintenance	*289,223	*371,547	*225,283	.....	*1,950	*298,814	*61,990	*72,733
Amortization of defense projects	151,086	166,590	15,840	15,557	45,959	61,658	89,287	89,375
Equalization	*378,249	1,136,968	*1,652,223	975,667	527,536	37,039	746,438	124,262
All other	99,387,345	89,070,690	37,654,056	30,514,309	19,209,361	20,284,757	42,523,929	38,271,624
Maintenance of equipment	145,014,359	122,993,884	62,739,239	51,700,891	27,652,209	24,340,227	54,622,911	46,952,766
Depreciation	25,191,104	23,597,704	9,392,322	9,263,826	5,583,074	5,349,213	10,215,708	8,984,665
Retirements	*76,180	*120,052	*12,353	*21,838	*13,690	*8,618	*50,137	*89,596
Deferred maintenance and major repairs	*181,923	*88,474	*74,865	*50,792	*10,276	*4,527	*96,782	*33,155
Amortization of defense projects	1,217,320	1,209,735	451,399	450,367	233,929	238,574	531,992	520,794
Equalization	1,096,780	252,275	*44,909	127,056	557,643	73,749	584,046	51,470
All other	117,767,258	98,142,696	53,027,645	41,932,272	21,301,529	18,691,836	43,438,084	37,518,588
Traffic	15,548,374	15,465,175	5,291,424	5,444,648	3,149,456	3,306,755	7,107,494	6,713,772
Transportation—Rail line	296,418,603	269,419,691	125,291,066	115,338,194	51,670,457	47,712,788	119,457,080	106,368,709
Miscellaneous operations	9,533,832	9,986,389	3,251,982	3,667,605	1,340,899	1,332,929	4,940,951	4,985,855
General	22,067,452	21,579,885	8,621,642	8,483,514	4,734,645	4,686,718	8,711,165	8,409,653
Railway operating expenses	600,697,481	541,205,118	247,010,361	220,908,271	110,652,041	103,519,059	243,035,079	216,777,788
Net revenue from railway operations	271,334,751	154,085,595	78,862,429	41,928,903	50,467,916	21,641,772	142,004,406	90,514,920
Railway tax accruals	133,245,141	75,556,669	37,429,753	22,033,632	29,629,330	12,762,912	66,186,058	40,760,125
Pay-roll taxes	22,588,738	20,554,600	9,347,201	8,535,342	4,164,778	3,925,273	9,076,759	8,093,985
Federal income taxes†	81,612,422	28,322,723	17,903,984	3,822,454	19,284,043	3,080,520	44,424,395	21,419,749
All other taxes	29,043,981	26,679,346	10,178,568	9,675,836	6,180,509	5,757,119	12,684,904	11,246,391
Railway operating income	138,089,610	78,528,926	41,432,676	19,895,271	20,838,586	8,878,860	75,818,348	49,754,795
Equipment rents—Dr. balance	12,231,238	11,993,744	6,198,221	4,549,222	*2,593,522	*278,917	8,626,539	7,723,439
Joint facility rent—Dr. balance	3,235,979	3,061,856	1,511,001	1,605,300	441,490	443,576	1,283,488	1,012,980
Net railway operating income	122,622,393	63,473,326	33,723,454	13,740,749	22,990,618	8,714,201	65,908,321	41,018,376
Ratio of expenses to revenues (percent)	68.9	77.8	75.8	84.0	68.7	82.7	63.1	70.5

FOR THE NINE MONTHS ENDED WITH SEPTEMBER 1950 AND 1949

Item	United States		Eastern District		Southern District		Western District	
	1950	1949	1950	1949	1950	1949	1950	1949
Miles of road operated at close of month‡	226,479	225,846	53,357	53,462	46,112	46,030	127,010	126,354
Revenues:								
Freight	$5,648,474,104	$5,344,502,472	$2,098,846,036	$2,004,528,292	$1,157,708,410	$1,074,752,791	$2,391,919,658	$2,265,221,389
Passenger	601,990,764	661,136,563	317,446,234	342,894,680	90,917,403	104,140,716	193,627,127	214,101,167
Mail	[1]171,548,148	161,225,907	59,186,224	59,451,646	28,405,261	28,999,428	83,956,663	72,774,833
Express	55,734,162	56,405,580	16,989,629	14,488,150	9,601,298	9,942,457	29,143,235	31,974,973
All other operating revenues	279,949,172	284,829,215	124,497,377	126,687,995	46,062,351	46,504,716	109,389,444	111,636,504
Railway operating revenues	6,757,696,350	6,508,099,737	2,616,965,500	2,548,050,763	1,332,694,723	1,264,340,108	2,808,036,127	2,695,708,866
Expenses:								
Maintenance of way and structures	951,045,279	1,000,021,108	334,961,801	355,243,262	200,353,459	202,257,439	415,730,019	442,520,407
Depreciation	98,514,699	95,039,904	41,639,611	40,035,145	17,656,097	16,562,673	39,218,991	38,442,086
Retirements	10,728,534	9,345,948	3,686,687	2,277,925	2,094,613	1,271,003	4,947,234	5,797,020
Deferred maintenance	*1,683,240	*2,882,104	*1,025,283	*328,422	*260,858	*1,482,963	*397,099	*1,070,719
Amortization of defense projects	1,354,757	1,350,505	156,956	138,923	401,576	421,242	796,225	790,340
Equalization	1,714,440	*8,431,282	*2,690,075	*5,106,301	5,597,898	*217,333	*1,193,383	*3,107,648
All other	840,416,089	905,598,137	293,193,905	318,225,992	174,864,133	185,702,817	372,358,051	401,669,328
Maintenance of equipment	1,239,786,029	1,224,970,281	520,660,263	503,479,017	241,178,794	244,669,695	477,946,972	476,821,569
Depreciation	221,226,702	207,349,708	82,241,154	80,437,709	49,554,825	46,505,175	89,430,723	80,406,824
Retirements	*431,308	*592,832	*71,974	*107,183	*185,085	*137,017	*174,249	*348,632
Deferred maintenance and major repairs	*9,284,843	*1,118,942	*8,665,810	*597,289	*113,225	*210,617	*505,808	*311,036
Amortization of defense projects	10,981,121	10,947,037	4,063,227	4,020,381	2,130,260	2,148,239	4,787,634	4,778,417
Equalization	4,305,089	1,883,557	2,780,591	1,441,887	907,221	573,745	617,277	*132,075
All other	1,012,989,268	1,006,501,753	440,313,075	418,283,512	188,884,798	195,790,170	383,791,395	392,428,071
Traffic	142,823,125	146,434,428	48,555,925	50,098,472	29,744,489	30,881,715	64,522,711	65,454,241
Transportation—Rail line	2,542,646,732	2,586,419,930	1,078,270,723	1,092,955,323	460,231,242	471,138,859	1,004,144,767	1,022,325,748
Miscellaneous operations	82,163,226	90,226,050	28,961,380	33,266,290	12,310,920	13,308,948	40,890,926	43,650,812
General	201,756,061	205,986,883	78,495,463	79,916,518	43,136,131	44,035,331	80,124,467	82,035,034
Railway operating expenses	5,160,220,452	5,254,058,680	2,089,905,555	2,114,958,882	986,955,035	1,006,291,987	2,083,359,862	2,132,807,811
Net revenue from railway operations	1,597,475,898	1,254,041,057	527,059,945	433,091,881	345,739,688	258,048,121	724,676,265	562,901,055
Railway tax accruals	783,694,146	634,755,533	246,575,421	217,085,373	185,201,059	138,311,312	351,917,666	279,358,848
Pay-roll taxes	193,144,996	192,866,342	79,322,275	79,320,182	36,507,431	36,849,649	77,315,290	76,696,511
Federal income taxes†	342,290,639	200,583,182	78,615,545	49,654,653	95,396,023	51,373,533	168,279,071	99,554,996
All other taxes	248,258,511	241,306,009	88,637,601	88,110,538	53,297,605	50,088,130	106,323,305	103,107,341
Railway operating income	813,781,752	619,285,524	280,484,524	216,006,508	160,538,629	119,736,809	372,758,599	283,542,207
Equipment rents—Dr. balance	104,409,202	95,502,615	50,608,318	42,087,514	*11,845,027	*6,168,492	65,645,911	59,583,593
Joint facility rent—Dr. balance	29,481,027	28,423,658	13,913,090	13,727,739	4,494,373	4,314,920	11,073,564	10,380,999
Net railway operating income	679,891,523	495,359,251	215,963,116	160,191,255	167,889,283	121,590,381	296,039,124	213,577,615
Ratio of expenses to revenues (percent)	76.4	80.7	79.9	83.0	74.1	79.6	74.2	79.1

‡Represents average of mileage reported at the close of each month within the period.
†Includes income tax and surtax.
*Decrease, deficit, or other reverse item.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.
[1]Includes the following amounts of additional railway mail pay accrued under the Post Office Dept. stipulation dated Oct. 11, 1950: $7,124,957 for the period Feb. 19, 1947 to Dec. 31, 1949; and $2,925,291 for the period Jan. 1, 1950 to Sept. 30, 1950. Excludes $1,837,665 accrued by certain carriers in Delayed Income Credits.

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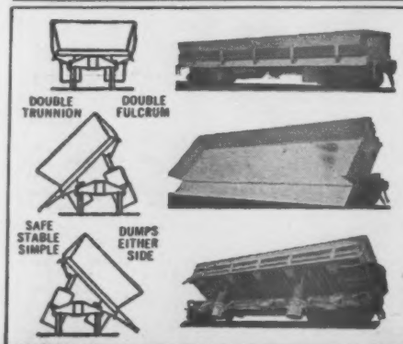

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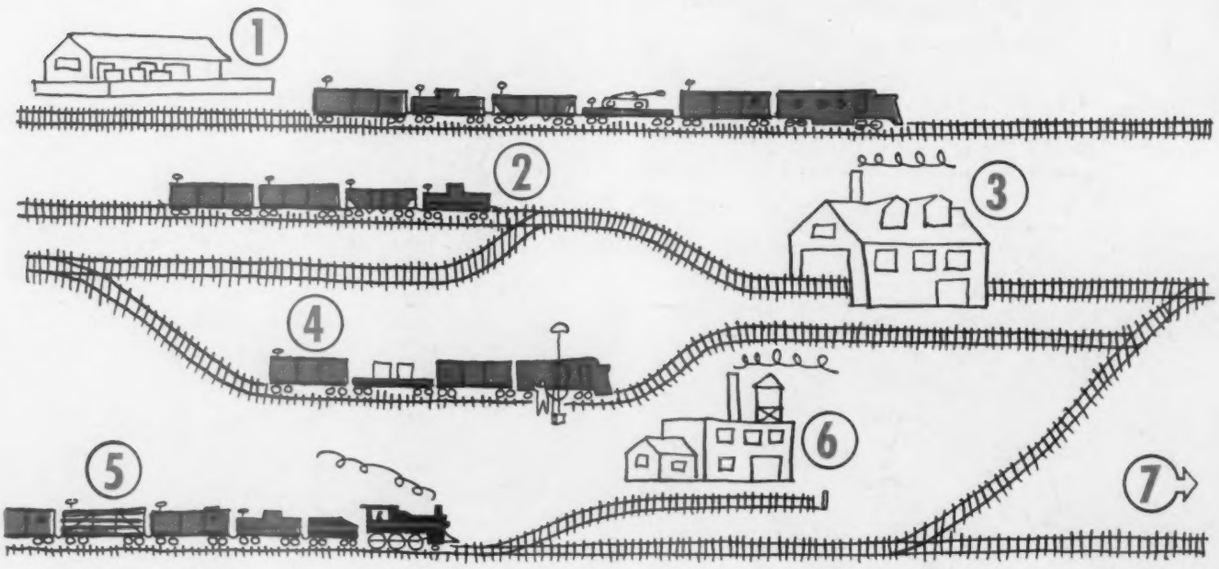

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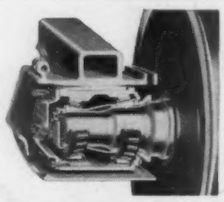

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